

EXAMINATION OF THEORETICAL PROGRAM MODELS
FOR THE DELIVERY OF MIDDLE SCHOOL GIFTED EDUCATION

By

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A DISSERTATION PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
DOCTOR OF PHILOSOPHY

UNIVERSITY OF FLORIDA

2005

ACKNOWLEDGEMENTS

This has been a wonderful and enlightening endeavor for me—one that I could not have achieved without the support of some very special and caring people. I have to thank my family for their unwavering support and encouragement, even though I am sure they all wondered if this was ever going to end. I thank my parents for instilling in me a love of learning and a determination to achieve. They have always pushed me to reach for the stars and have provided the guidance and support to enable me to do it. My husband, Eric, has been my rock throughout this journey. I began this doctorate program just one month after we got married, and he has known nothing but the stressful life of being married to a “doc” student. I appreciate all his encouragement and his willingness to sacrifice to be sure that I reached my goal. If I could, I would grant him an honorary doctorate, because I feel that he has been as much a part of this journey as I have. I want to thank my daughter, Brea, who was born to the tribulations of a mother completing her dissertation. She was always smiling and giving me a reason to actually complete it.

My committee chair, Dr. Phil Clark, has been an inspiration since I began this journey five long years ago. Dr. Clark told me that this was a “marathon and not a sprint.” Was he ever right—that was a lesson I learned all too quickly. I thank him for his support, his caring demeanor, his feedback, and his words of wisdom. Dr. Doud has also been an influential part of my doctoral studies. He has always encouraged me to push myself and “stretch myself to think that much deeper.” I thank him for his kind words and supportive feedback. I would like to thank Dr. Paul George for wonderful

insights and knowledge into the world of middle school education. He pushed me to think deeper and gave me a great deal of knowledge and information along the way.

I thank everyone who had to endure this tiring journey with me. I know that the sacrifices of my family and friends were many and often unmentioned or seemingly unnoticed. I want them all to know that I noticed everything they have done for me, and I truly thank them from the bottom of my heart. I feel that this accomplishment belongs as much to all of them as it does to me.

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Abstract of Dissertation Presented to the Graduate School
of the University of Florida in Partial Fulfillment of the
Requirements for the Degree of Doctor of Philosophy

EXAMINATION OF PROGRAM DELIVERY MODELS FOR MIDDLE SCHOOL
GIFTED EDUCATION PROGRAMS

By

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December, 2005

Chair: Phil Clark

Major Department: Educational Administration, Policy, and Foundations

The purpose of this study was to identify common components of both middle school and gifted education. The literature suggests a conflict between the philosophy of gifted education and the philosophy of middle school education. The middle school philosophy and practice have been largely viewed by gifted educators as antithetical to the educational needs of gifted and talented students. Middle school and gifted education models were reviewed to develop a list of components common to both sets of models. A single Florida school district was then studied to determine the components present at each middle school and to what extent. Since the purpose of this study was to identify themes of a model that fall into the identified category, the term “component” was utilized as the label for the individual part of each model that pertains to the category of program delivery.

This qualitative study was approached by taking the identified components of gifted and middle school education and developing a questionnaire. The questionnaire

was utilized in interviews with middle school principals or their designees within a large Central Florida school district. Classroom and campus observations were then conducted to determine any identified components present and to what degree.

This research provides educators with current data on how middle school and gifted education theory come into balance as well as a current look into how a public school district in Florida is managing the balance of delivering a gifted education program within the middle school setting. This body of research also offers insight into the impact of Florida accountability measures on middle school gifted education program delivery.

CHAPTER I INTRODUCTION

Since 1971 when Sydney P. Marland, then U. S. Commissioner of Education, issued his report to Congress concerning the condition of gifted education in America, curriculum development and program delivery options have become a primary focus of gifted education. The Marland Report (1971) stated that gifted and talented students require differentiated educational programs beyond those normally provided in the regular school program (Chance, 1998). The term “differentiated curriculum” has become a primary objective of educating gifted students. The focus of this research was gifted education program delivery models within the middle school setting.

The literature suggests a conflict between the different philosophies of gifted education and middle school education. The middle school philosophy and practice have been largely viewed by gifted educators as antithetical to the educational needs of gifted and talented students (Clark, 1992; Feldhusen, 1990). Feldhusen believed that “the middle school movement demands an end to all special classes for the gifted” (p. 47). Many gifted advocates believe that the middle school philosophy, which relies heavily on heterogeneous grouping, will virtually make gifted and talented education extinct (Silverman, 1990). The philosophical difference between gifted educators and middle school philosophers has created much debate and made policy development an intensely political endeavor among school boards. Recent research, however, supports the notion that characteristics of effective middle schools are also necessary characteristics of

apparent philosophical difference between middle school education and gifted education, observing that characteristics of effective middle schools are also necessary characteristics for successful programs for gifted students.

The apparent conflict between advocates for gifted education and for middle school education was the primary impetus for this study. “If characteristics of middle school education were also characteristics of gifted education as Peterman (1990) suggested, then educational practices for gifted students should be able to be successfully implemented within the middle school context” (Chance, 1998, p. 6). However, if characteristics of middle school education and gifted education are in conflict, as Feldhusen (1990) and Silverman (1990) suggest, there may be underlying philosophical assumptions supporting these incompatible characteristics. The propositions suggested by the previous statements prompted the need for analysis of current educational models from both gifted education and middle school education. These models can then be applied to middle schools to compare how actual middle schools are serving gifted students, utilizing the common themes that exist in both models as the means for comparison.

Gifted Education

Gifted education has been a source of debate for decades. Much of the debate has been centered on the various definitions of the term “gifted,” program delivery options, and funding. Clark (1992) described “giftedness” as “a dynamic process in which a person’s innate ability is in constant and continuous interaction with the environment” (p. 12). She went on to offer a definition of “giftedness” as “a biologically rooted concept that serves as a label for a high level of intelligence and indicates an advanced and

accelerated development of functions within the brain, including physical sensing, emotions, cognition, and intuition” (p. 8).

Gallagher (1985) described “gifted” as follows:

The one factor that youngsters labeled “gifted” have in common is the ability to absorb abstract concepts, to organize them more effectively, and to apply them more appropriately than does the average youngster. Apart from that, however, the range of other variables, such as social abilities and personality, is almost as great as one would find in a random selection of youngsters of a given age. (p. 21)

Gallagher and Weiss (1983) describe leadership as a major component of giftedness. Part of their research centers around the debate that the environment or given circumstances play a role in identifying or defining leaders:

Two classic leadership theories pose competing views of the emergence of a leader: “Great Man Theory” holds that particular individuals are endowed with characteristics that cause them to stand out and permit them to guide, direct and lead the majority; the “Times Theory” views leadership as a function of a given set of social characteristics and situations. (p. 9)

Gallagher and Weiss (1983) have combined the theories to create a list of leadership qualities evident in the gifted and talented:

- strong drive for responsibility and task completion
- vigor and persistence in the pursuit of goals
- venturesomeness and originality in problem-solving
- self-confidence and sense of personal identity
- willingness to absorb interpersonal stress
- ability to influence others’ behavior
- willingness to tolerate frustration and delay
- capacity to organize people for a specific purpose.

“Giftedness,” as defined by Tannenbaum (1983), was exhibited in children who “have a potential for becoming critically acclaimed performers or exemplary producers of

ideas” (p. 86). Renzulli (1978) developed a three-ring conception of giftedness to include (a) well above-average ability, (b) task commitment, and (c) creativity. Renzulli defined “well-above average ability” as “performance or the potential for performance that is representative of the top 15 to 20 percent of any given area of human endeavor” (p. 23).

Middle School Education

Middle school years, typically between the ages of 10 and 15, represent an age period characterized by physical, emotional, and cognitive changes (Eichorn, 1966; Van Hoose & Strahan, 1988). The period was called “transescence” by Eichorn, emphasizing the fact that it is a transitional period of development linking childhood and adolescence. Eichorn labeled this time frame the “transescence period” because it is

based on the many physical, social, emotional, and intellectual changes in body chemistry that appear prior to the puberty cycle to the time in which the body gains a practical degree of stabilization over these complex pubescent changes. (p. 3)

Middle school education reflects a philosophy that “schools should be a place where close, trusting relationships with adults and peers create a climate for personal growth and intellectual development” (Carnegie Council on Adolescent Development, 1989, p. 37). “The challenge of middle school education is to develop an educational program that is based on the needs and characteristics of a most diverse and varied population” (National Middle School Association, 1992, p. 3). Proponents of the middle school philosophy advocate an educational environment that equally addresses students’ social-emotional needs as well as their physical and cognitive needs (Chance, 1998).

The nature of the transescent stage of development may in itself be a cause for underachievement in gifted students in middle school (Compton, 1982). Rimm (1986) suggests, however, that underachievement is a phenomenon that exists throughout all

levels of education. The focus of gifted underachievement has prompted much attention to developing a gifted education program that offers a differentiated education to meet the special needs and unique characteristics of gifted students (Clark, 1992; Gallagher, 1985; Tannenbaum, 1983).

Research Focus

The problems associated with the implementation of a middle school gifted education program are the central focus of this study. The primary question is: How do middle schools deliver gifted education programs when the primary objectives of each program are seemingly in conflict? This research examined existing research on how to deliver a gifted program in a middle school and looked at how current middle schools are delivering gifted education. The goal was to determine if there is any correlation between research and the current trends of middle schools that offer insight into the themes and practices that must exist in both gifted education and middle school education in order to make both programs successfully function in conjunction with one another.

The problem addressed by this study was the identification of compatible themes that exist between gifted education and middle school education. A sample of gifted education models and middle school education models was identified in the literature. These models were examined to identify common themes in both categories. These themes were organized into a series of questions and observations developed to examine the various ways one Florida school district organizes its gifted education program and how it is utilizing the identified components in its schools.

In 1972, then U. S. Commissioner of Education Sydney Marland formed a federal task force to study gifted and talented education. This task force followed a Congressional mandate to grant federal funds to gifted education programs (Eby &

Smutny, 1990). Marland issued his report to Congress concerning the status and condition of gifted education in the U. S. The Marland Report sparked new investigations and the creation of new public policy in relation to serving the gifted and talented. The definition utilized by the Marland Report has been the foundation for most state education policies regarding identification and program development. The initial definition stated:

Gifted and talented children are those identified by professionally qualified persons who, by virtue of outstanding abilities, are capable of high performance. These are children who require differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their contribution to self and society. (Marland, 1972, p. 13)

The Marland Report categorized children capable of high performance to include those with demonstrated achievement or potential in any of the following area(s):

1. general intellectual ability
2. specific academic aptitude
3. creative or productive thinking
4. leadership ability
5. visual and performing arts ability
6. psychomotor ability.

As a result of the Marland Report, most states utilized uniform goals regarding the development of gifted education programs. Public Law 94-142 was created to insure that education meets the special individual needs of youth. While this law pertains only to the education of handicapped and learning-disabled youth, it has provided a framework under which gifted and talented policies have developed.

Chapter 228, F. S., requires the Florida public school system to provide 13 consecutive years of instruction for all children, including exceptional students. The law

defines an “exceptional student” as “any child who has been determined eligible for a special program in accordance with State Board of Education rules” (p. 3). The State of Florida has included gifted and talented students in its Exceptional Student Education Program since 1968. Rule 6A-6.03019, F.A.C, defines a “gifted student” as “one who has superior intellectual development and is capable of high performance” (p. iii).

Florida eligibility requires the student to meet one of the following criteria:

1. The student demonstrates a need for a special program, has a majority of characteristics of gifted students according to a standard scale or checklist, has superior intellectual development as measured by an intelligence quotient of two (2) standard deviations or more above the mean on an individually administered standardized test of intelligence; or
2. The student is a member of an under-represented group and meets the criteria specified in an approved school district plan for increasing the participation of under-represented groups in programs for the gifted. (The Florida rule defines under-represented groups in programs for gifted as “groups whose racial/ethnic backgrounds are other than white non-Hispanic, or who are limited English proficient, or who are from a low socio-economic status family.”)

In 1991, the Florida Department of Education adopted the Plan B rule, which encouraged school districts to develop innovative strategies to increase the number of under-represented students in gifted programs. The State of Florida considers gifted education as a part-time program.

The purpose of this study was to determine the common components that exist between both gifted education and middle school education. The review of literature identified compatible themes between middle school and gifted education, and these themes were used as the basis for the comparison of the program delivery models. Content analysis was utilized to provide a framework for the design of the study. Models designed specifically for gifted education, as well as middle school education models,

were compared to find common components. Existing school policies and practices were identified through a case study approach of middle schools within one school district.

Program Delivery Models

Samples of gifted education models were selected from various documents to survey models that present a general overview of gifted middle school education. The three major areas identified to assist with the determination of the delivery model were (a) content, (b) instruction, and (c) delivery system. A comparison of gifted education models to middle school education models added a theoretically significant component to this study. Prominent middle school models were compared to gifted education models.

Several middle school models were used, including those proposed by Alexander, Williams, Compton, Hines, & Prescott (1968), Beane (1990), Eichorn (1966), Lounsbury and Vars (1978), George and Alexander (2003), the National Middle School Association (2003), and the Carnegie Council on Adolescent Development (1996).

Alexander et al. (1968) focused their model of personal development through guidance and counseling, student activities, and continued learning. Beane (1990) recommended that middle schools address problems and concerns of the average adolescent student. Eichorn (1966) proposed a socio-psychological model based on flexible scheduling, team teaching, and grouping of students by teams. George and Alexander (2003) proposed that the focus in middle schools should be on the individual student through developmentally appropriate and challenging structuring of the school day. Lounsbury and Vars (1978) advocated the block scheduling approach. They proposed cross-grouping according to age and flexible scheduling. The National Middle School Association (2003) focused on comprehensive guidance for students, family and community involvement, flexible structuring, and a focus on adolescent development.

The Carnegie Council on Adolescent Development (1996) advocated creating education reform for middle schools through the use of new partnerships between schools, families, healthcare system, and community.

The gifted education models utilized were proposed by Clark (1992), Gallagher (1985), Kaplan (1974), Renzulli and Reis (1985), Taylor (1978), and Treffinger (1986).

Clark (1992) established a gifted education delivery model that included multi-age grouping and was based on the interacting spheres theory of intelligence encompassing the four major intellectual components: thinking, intuition, feeling, and sensation. Gallagher's delivery system model for gifted education (1985) is based on a modified learning environment that might include (a) enrichment in the regular classroom, (b) consultant teacher, (c) resource room, (d) mentor, (e) independent study, and (f) special interest classes or schools.

The gifted education delivery model presented by Kaplan (1974) presents a more segregated or homogeneous setting for gifted students. Kaplan suggests that gifted and talented students spend time with their intellectual peers at various times throughout the day. The Kaplan model places emphasis on outside enrichment activities that allow for multiple class groupings and provide activities that are an extension of the regular classroom curriculum.

The Schoolwide Enrichment Model, as presented by Renzulli and Reis (1985), offers a more wide-range approach to educate high-ability students. Renzulli's plan focuses on the top 15% to 20%, as opposed to the typical 3% to 5% represented in most gifted and talented programs. Taylor (1986) proposed a gifted education delivery model that primarily focuses on using the current subject matter in regular classrooms to develop each student's talents. Taylor recommends the use of a biological screening tool

to focus on multiple talent areas and to identify students from multiple talent pools.

The gifted education delivery model, which was developed by Treffinger (1986), is based on individualized planning and programming for gifted students. Treffinger suggests that the highest students be targeted, based on above-average ability, creativity, or task commitment.

Statement of the Problem

This study was designed to investigate the presence of consensus-based components for gifted education within a middle school setting. Specifically, this research addressed the following questions:

1. What are the major components identified by existing middle school models?
2. What are the major components identified by existing gifted education delivery models?
3. What categories are compatible themes across both gifted education and middle school education delivery models?
4. What components of middle school education and gifted education are present in the middle schools of a large Central Florida public school district?
5. What components of middle school education and gifted education most frequently occur in conjunction with one another?

Glossary of Terms

This section includes the definitions of terms that are used in this research report.

Ability grouping is the act of placing students of similar ability in the same class or group for purposes of instruction.

Acceleration is when there is a faster presentation of content to more closely match the speed at which gifted students learn.

Achievement is an accomplishment or performance and the realization of potential.

Affective education is the study of identifying and dealing with emotions.

Alternative schools are schools designed with flexible programs for exceptional learners or with an educational philosophy different from regular public education.

Asynchronous development refers to the different rates for physical, cognitive, and emotional development, also known as “dyssynchronous development.”

Commonality is the identification of themes among a group of models, that is, gifted education models or middle school education models, which appeared in at least 60% of the models in that group (Chance, 1992).

Compatibility exists when items are in agreement or congruous (*Merriam-Webster's Collegiate Dictionary*, 1997).

Curriculum is the total educational program, including content, instruction, and delivery systems (Chance, 1992).

Delivery system encompasses the delivery of educational services, including the scheduling and organization of academic and co-curricular activities, and the inclusion of student support services, such as guidance or health-related programs (Chance, 1992).

Exceptional learners are students with an IQ in the bottom (disabled) or top (gifted) 3% of the population, or those with other physical or mental differences that affect learning.

Extrinsic motivation includes reinforcers, rewards, or incentives used by one person to bring about desired behaviors.

Gifted programs are special academic and social opportunities that try to meet the needs of gifted students through acceleration, ability grouping, enrichment, independent study, and/or pull-out.

Gifted education is a curriculum for students who exhibit outstanding performance in academic areas (e.g., social sciences, language arts, science, or mathematics) or who show potential for high academic performance.

Homogeneous classroom exists when all students are of the same academic level within the same classroom.

Interactionism is a social-psychological theory that the self is formed by interacting with others and that social life depends on the ability to imagine ourselves in other social roles.

Instruction includes the strategies and methods employed to teach the curriculum, or *how* content is presented to students (Chance, 1992).

Least-restrictive environment (LRE) is the school placement where the student's needs can be met in an environment that most closely approximates the regular classroom.

Middle school education program is a developmental approach to schooling in Grades 5 through 8 that builds the curriculum around perceived social-emotional needs of the average early adolescent. (National Middle School Association, 1982).

Model is a set of plans, principles, or criteria based on a stated or implied rationale and presented as a unified framework worthy of being initiated or replicated. (Unruh & Unruh, 1984, p. 124).

Normal is a range of behavior that is considered socially acceptable.

Perfectionism is the desire to execute tasks flawlessly.

Self-esteem is a subjective feeling of self-worth built from the respect and sense of worth reflected back on the person from significant others.

Delimitations and Limitations of the Study

This section identifies the delimitations and limitations for this study.

Delimitations

This section identifies the delimitations for this study:

1. This study was conducted in a school district in Florida. Results cannot be generalized to other areas in the U. S.
2. The data were collected from public schools. Results and conclusions do not necessarily apply to non-public schools.
3. The current study was limited to instructional and program delivery models in gifted education programs in middle schools.
4. This study was limited to data gathered during the 2004-2005 school year. Therefore, conclusions and generalizations made from this study should not be generalized to other time periods.
5. This study was limited to a comparative analysis of gifted education program implementation within the middle school setting in one Central Florida school district.

Limitations

This section identifies limitations that were present in this study:

1. The assumption was made that respondents answered accurately to questions regarding the participating school's middle school gifted education program during the interview.
2. The assumption was made that observations of the researcher represented an accurate depiction of each school's policies and practices.

Significance of the Study

This study was intended to contribute to the understanding of factors that were present in the delivery of an effective middle school gifted education program in a large Central Florida public school district. This compilation of research was intended to provide a further investigation into the existing literature regarding the development of a gifted education model that is compatible with middle school philosophy at the local level. Cox, Daniel, and Boston (1985) have identified three major themes that have helped develop gifted curriculum: age level, type of giftedness, and instructional strategy. Programming options related to age level were the primary focus of this research, because the study focused on gifted education within the middle school setting.

Descriptions of gifted programs that are organized by age or grade level generally categorize programs as “elementary” or “secondary.”

Typically, middle school education and gifted educational needs have functioned separately. “The junction of these separate populations, that is, of gifted middle school students, has been treated by one field as a subset of the other” (Chance, 1992, p. 7). Research and literature on middle school education usually address students between ages 10 and 14 as a whole without specifically focusing on any specific group within this population. This study adds to the knowledge of both middle schools and gifted education through a formal comparative analysis of individual middle schools in a Central Florida public school district. These data also provide information for developing a delivery model for gifted education within the middle school setting.

Overview

Chapter 1 provides an introduction, statement of the problem, purpose of the study, glossary of terms, delimitations and limitations of the study, and the significance of the study. Chapter 2 consists of a review of relevant literature. This includes a description of the theory of program delivery models, as well as an historical perspective of the development of gifted education program implementation. Chapter 3 consists of the proposed methodology of this study. Chapter 4 presents the results and analysis of the data in this study. Chapter 5 includes a summary, discussion, conclusions, and recommendations for future study.

CHAPTER 2 REVIEW OF LITERATURE

Introduction

A review of the literature was conducted in gifted education and middle school education to provide a background for this comparative study. Philosophical and theoretical backgrounds in both areas were reviewed to establish a foundation for the work of research. Educational theories and models were reviewed in both areas to provide insight into past and current policy development.

Statement of the Problem

The problems associated with the implementation of a middle school gifted education program are the central focus of this study. The primary question is: How do middle schools deliver gifted education programs when the primary objectives of each program are seemingly in conflict? The target of this research was to examine existing research on how to deliver a gifted program in a middle school, as well as to look at how current middle schools are delivering gifted education. The goal was to determine if there is any correlation among research and the current trends of middle schools that offer insight into the themes and practices that must exist in both gifted education and middle school education in order to make both programs successfully function in conjunction with one another.

This study was designed to analyze and compare the multiple methods of delivery for gifted education within a middle school setting. Specifically, this research addressed the following questions:

1. What are the major components identified by existing middle school models?
2. What are the major components identified by existing gifted education delivery models?
3. What categories are compatible themes across both gifted education and middle school education delivery models?
4. What components of middle school education and gifted education are present in the middle schools of a large Central Florida public school district?
5. What components of middle school education and gifted education occur most frequently in conjunction with one another?

Historical Development of Gifted Education

The history of gifted education can be traced back to 1870 with the publication of *Hereditary Genius: An Inquiry into Its Laws and Consequences* by Sir Francis Galton. Galton's work was the first quantitative psychological study of giftedness (Association for the Gifted, 1978). Galton was the first to develop a conceptual basis for differentiation in human intellect, as well as a theory of fixed intelligence. Between 1865 and 1900, a number of schools introduced programs that paid special attention to gifted children (Gallagher & Weiss, 1983). In 1867, William Harris, Superintendent of the St. Louis Public School System, developed a plan of flexible promotions to adapt for students' different rates of progress. This program allowed children to advance at their own rates and allowed for promotions every 5 weeks, based on student achievement. Harris's plan was one of the first attempts to accelerate students. The major trend during this time period was multiple tracking—establishing fast, medium, and slow groups. The first of these programs occurred in Elizabeth, New Jersey, in 1866. Little evidence exists that the courses actually offered altered content; it appears that the program merely accelerated the existing curriculum.

During the era of 1900 to 1925, a major development occurred in gifted education with the development of instruments to measure intelligence. French scientists Alfred Binet and Theodore Simon developed Galton's ideas from the late 1800s to create the first intelligence test (Gallagher & Weiss, 1983). The test designed by Binet and Simon, however, was primarily used to identify the mentally retarded.

In 1916 Lewis Terman revised the Binet scale and published the Stanford-Binet Individual Test of Intelligence. It yielded an intelligence quotient (IQ) that gave a rating of a person's standing in relation to the rest of the population. This test served as the primary tool for the identification of gifted students during the immediate 40 years after its inception. Terman theorized that giftedness or IQ was determined by heredity (Clark, 1992). "Terman defined intelligence as a difference in degree of ability rather than in a kind of ability" (Chance, 1992, p. 15). The theoretical basis of Terman's work was based on the development of giftedness in early childhood. His work not only indicated the need for special education of gifted students, but it helped develop early identification programs to identify students based on his IQ scale and then to educate these students using a differentiated learning environment (Tannenbaum, 1983).

In 1903, J. Cattell published *A Statistical Study of Eminent Men*, introducing the idea that gifted characteristics were innate rather than a product of social tradition or physical environment. In 1916, Terman's book, *The Measurement of Intelligence*, suggested that certain courses of study should be designed to permit gifted and talented students to progress at a rate appropriate for each individual student. Terman further suggested that teachers determine the coursework for a student in proportion to the child's mental ability. Frederick Burke, along with Carlton Washburne, designed a self-instructional plan for gifted learners in 1912. Their plan, proposed in Winnetka, Illinois,

was the first of its kind. The plan allowed gifted children to progress at their own rates. A few years later, the Dalton Plan was proposed in New York, which similarly allowed students to self-pace. But the Dalton Plan organized the content into monthly units under which students contracted to develop their own individualized education plans. This was a popular plan for advanced learners during this time period. However, due to increasing populations of students, school administrators were forced to seek other options for gifted learners (Gallagher & Weiss, 1983). The development of the Cleveland Major Work Classes became what is now a popular model for gifted education. The emphasis of this program was placed on enrichment, utilizing special curricula, and the acceleration of course content rather than purely speeding the student through a standard curriculum (Gallagher & Weiss, 1983). In Massachusetts in 1901, the first separate school for the gifted was established, along with the Lincoln School and Horace Mann School in New York.

In 1925, Terman conducted a longitudinal study on 1,500 students with high IQs. Terman's study was titled *Genetic Studies of Genius—Mental and Physical Traits of a Thousand Gifted Children, Volume I*. In 1926, Graham Wallas identified four stages in developing new thoughts: preparation, incubation, illumination, and verification. Wallas's work, *The Art of Thought*, began to revolutionize how educators approached gifted student development. The 1945 report of the Harvard Committee, *A General Education in a Free Society*, launched a new development in the ideals of gifted education. The report stressed that equality of opportunity did not mean identical provisions for all. Instead it meant that students should have access to those avenues of education that matched their gifts and interests.

The 1950 *Education of the Gifted*, written by the National Education Association's Educational Policies Commission, identified America's neglect of the mentally gifted and talented that was producing diminishing numbers of personnel in the sciences, arts, and other professional roles. J. Paul Guilford's presidential address to the American Psychological Association challenged its members to pursue research studies of the mentally superior. Guilford proposed that intelligence was based on internal human components. In the mid-1950s, Abraham Maslow and Benjamin Bloom grouped learning experiences in hierarchies, which determined that gifted minds were self-actualizing and sought stimulation. By 1948, the movement was leaning away from ability grouping, with less than 1% of large school districts reporting such programs. Aside from grade-skipping, in the early 1950s, early admissions programs entered the educational scene. This allowed extremely bright students to enter grade school early. The first of such programs began in Massachusetts and Nebraska.

The 1957 launch of Sputnik by the Russians created an increased look into how all children, including the gifted, were educated. The National Science Foundation sponsored several projects to encourage gifted students to pursue careers in math and science. The projects included: School Mathematics Study Group, Physical Sciences Study Committee, Biological Sciences Curriculum Study, Chemical Bond Approach, and Project Physics (Gallagher & Weiss, 1979). The Rockefeller Brothers Fund published *The Pursuit of American Excellence: Education and the Future of America* in 1958 to emphasize the importance of enabling every citizen to achieve his optimal performance as a way of stimulating the American citizenry. The introduction of John Flanagan's project TALENT in 1960 created a flurry of research and writing regarding delivery models of gifted education. Flanagan's study included a national longitudinal inventory

of human talents, utilizing more than 44,000 students in 1,350 secondary schools across the U. S. The study was an attempt to relate adult performance to aptitudes measured in adolescence and to compare those to educational experiences. Later in 1960, *Goals for Americans* was issued in the Report of the President's Commission on National Goals. This report stated that "equality of opportunity for all citizens to experience an educational program uniquely reflective of the individual citizen's capabilities is the only goal worthy of a free society." The national push became individualized education for the gifted and talented. *Excellence: Can We Be Equal and Excellent Too?* by John Gardner in 1961 emphasized the importance of recognizing and developing the talents of all students. Gardner stated that "equalitarianism is wrongly conceived when it ignores differences in native capacity and achievement. . . . All who care about excellence in a society should vigilantly strive to prevent the waste of talent" (p. 12). During this era, the focus became not only how to arrange the education of gifted children (special classes or acceleration), but what should be included in the content of those classes (Gallagher & Weiss, 1983). In this same era, Guilford (1967) developed the theory of the Structure of Intellect. The Structure of Intellect categorized intelligence into three major dimensions: operations, contents, and products. The dimensions outlined 150 factors of intelligence or abilities.

The evolution of educational thought regarding higher ability learning was further encouraged by the work of David Krathwohl (1980). His research grouped educational objectives into a hierarchy with each level demanding a greater intellectual commitment and higher level of decision-making capability. Many educators used this and other types of research to delineate the fact that gifted and talented students required education

delivered at a level more compatible with their individual cognitive development. The new ideas in curricula created a general objective for gifted students to include:

mastering the structure of disciplines at the heart of the subject matter (rather than simply learning facts and associations), learning the skills of problem solving, creativity, scientific methods, and to become more autonomous learners, unconstrained by the limits of teacher or programs. (Gallagher & Weiss, 1983, p. 18)

The 1960s brought changes that affected not only gifted education, but middle grades education as well. The traditional 8-4 plan of 8 years in grade school and 4 years of high school was replaced with the 6-3-3 plan. This new plan incorporated 3 years for middle grades or junior high school education. Educators began to feel that the capable learner would be better suited to spend more time in high school. "A growing trend in both city and suburban communities is to terminate the junior high school sequence at the eighth grade, grouping the young adolescents with the older teenagers rather than with younger children" (Hildreth, 1966, p. 404). This was also thought to help aid in the grade acceleration process.

In 1970, Congress encouraged the U. S. Commissioner of Education to conduct a study to evaluate the status of education for the gifted and talented students of the nation. In 1971, Sidney Marland, U. S. Commissioner of Education, reported to Congress. Marland's report, *Education of the Gifted and Talented*, later became known as the "Marland Report." The report generated attention for the gifted and talented on the federal, state, and local levels. Many school districts were utilizing special classes for gifted children during this time period. The special classes, which used a special and sophisticated curriculum designed for the gifted, were taught by trained teachers. However, many psychologists and educators began to feel that these children were spending insufficient time with non-gifted children. A new movement gradually

developed that was based on modified special classes. This allowed the gifted students to split school time with peers of their age and the other part with a special instructor in resource rooms or enrichment classes (Gallagher & Weiss, 1983). The goal of such a program was to meet both the intellectual and social needs of the child.

The establishment of the Education Resource Information Center (ERIC) Clearinghouse on Handicapped and Gifted Children in 1972 provided a database for past and future research by gathering, evaluating, and disseminating information and developments in gifted education. ERIC was operated by the Council for Exceptional Children. Shortly following the establishment of ERIC, the National/State Leadership Training Institute (LTI) on Gifted and Talented was created. The national spotlight was placed on improving gifted and talented education, and such programs were backed by congressional action.

In 1975, the passage of the Education for All Handicapped Children Act guaranteed a free and appropriate public education for all exceptional children. The Council for Exceptional Children published *The Nation's Commitment to the Education of Gifted and Talented Children and Youth*. The report outlined the findings from the 1977 study of policies, services, and resources in gifted education in all 50 states. In 1978, Congress again put a national spotlight on gifted and talented education when it passed an act that provided financial assistance to public and private, state and local, K through 12, and higher education institutions to improve services and programs for gifted and talented students. In the 1970s, Joseph Renzulli advocated the use of the Enrichment Triad Model. The model would allow the students to be exposed to places, events, persons, hobbies, topics, and disciplines not regularly afforded in the regular education classroom.

In 1981, Florida developed the Challenge Grant Program for the Gifted. It was created to encourage public schools to develop exemplary programs that challenge gifted students. Multiple projects are funded under this grant and are designed to improve existing programs, develop a new model for existing programs, or expand student participation.

The late 20th century brought an abundance of research into human intelligence that built on the existing controversial data. Sternberg (1986) developed the triarchic theory of intelligence that included three major components: internal mental mechanisms, the role of experience, and environmental interaction. Gardner (1985) developed the theory of multiple intelligence in which he categorized intelligence into seven categories: (a) linguistic, (b) musical, (c) logical-mathematical, (d) spatial, (e) bodily-kinesthetic, (f) interpersonal, and (g) intrapersonal. Gardner's theory built on biological research and brain development (Chance, 1992).

Identifying and Serving the Gifted

Clark (1992) described giftedness as “a dynamic process in which a person's innate ability is in constant and continuous interaction with the environment” (p. 12). She went on to offer a definition of “giftedness” as “a biologically rooted concept that serves as a label for a high level of intelligence and indicates an advanced and accelerated development of functions within the brain, including physical sensing, emotions, cognition, and intuition” (p. 8). Clark's definition was based on the interaction of four functions: physical, thinking, emotion, and intuition. “Physical,” as determined by Clark, represents the interaction that a person has with his environment and his senses.

Gallagher (1985) described “gifted.”

The one factor that youngsters labeled “gifted” have in common is the ability to absorb abstract concepts, to organize them more effectively, and to apply them more appropriately than does the average youngster. Apart from that, however, the range of other variables, such as social abilities and personality, is almost as great as one would find in a random selection of youngsters of a given age. (p. 21)

Feldhusen (1985) developed a theory of giftedness that relied on four principal domains that interact to produce talent: high-level ability, self-concept, motivation, and creativity. Feldhusen further defined each domain to offer specific insight into each area. High-level ability was defined as “capacities or potential for receiving and processing information about the world and for generating adaptive actions in response to their world” (p. 5). Self-concept, as described by Feldhusen, requires an understanding by the person regarding his own abilities as well as his social and emotional relationships with other high-ability individuals. Self-concept also encompasses feelings of satisfaction or pride in one’s own endeavors. Feldhusen places a high emphasis on creativity in terms of its relation to the gifted and talented.

Gallagher and Weiss (1983) also noted the role of creativity in the minds of the gifted and talented: “While there is a close relationship between high mental ability and creativity, it has become clear that there are particular intellectual skills and personality traits that predispose certain children and adults to creativity” (Gallagher & Weiss, 1983, p. 7). Research has offered a suggestion that the personal traits of gifted children make them predisposed to do the intellectual operations that are necessary to the creative process. Gallagher and Weiss (1983) describe leadership as a major variety of giftedness. Part of their research centers around the debate that the environment or given circumstances play a role in identifying or defining leaders.

Gallagher and Weiss (1983) have combined the theories to create a list of leadership qualities evident in the gifted and talented:

1. strong drive for responsibility and task completion
2. vigor and persistence in the pursuit of goals
3. venturesomeness and originality in problem-solving
4. self-confidence and sense of personal identity
5. willingness to absorb interpersonal stress
6. ability to influence others' behavior
7. willingness to tolerate frustration and delay
8. capacity to organize people for a specific purpose.

“Because these qualities are in many respects responsive to training, the concept of enhancing or creating gifted leaders appears to be reasonable, given a base of such strong personal characteristics as high intellectual ability” (Gallagher & Weiss, 1983, p. 9).

“Giftedness,” as defined by Tannenbaum (1983), was exhibited in children who “have a potential for becoming critically acclaimed performers or exemplary producers of ideas” (p. 86). He further noted that for such talents to be fostered into becoming gifted adults, the students must “not only have the personal attributes that are often mentioned in definitions of giftedness, but also some special encounters with the environment to facilitate the emergence of talent” (p. 86). Tannenbaum combined five variables to develop his multifactor theory of intelligence to include: (a) general ability, (b) special ability, (c) non-intellective factors, (d) environmental factors, and (e) chance factors.

Renzulli (1978) developed a three-ring conception of giftedness to include: (1) well above average ability, (2) task commitment, and (3) creativity. Renzulli defined “well above average ability” as “performance or the potential for performance that is representative of the top 15% to 20% of any given area of human endeavor” (p. 23). Task commitment was defined as “perseverance, endurance, hard work, dedicated

practice, self-confidence, and a belief in one's ability to carry out important work" (p. 26). Renzulli further described creativity as the products or successes of an individual, as opposed to personality traits.

Many theorists combined the concepts of nature and nurture in their development of gifted definitions and theories. Passow (1985) discussed the importance of nurturing gifted children in order for them to reach their full potential and capacity.

Many gifted students lack social development. One of the main areas of underdevelopment is "found in the relationship between advanced intellectual development and the development of emotional and social skills" (Hirsch, 1996, p. 99). The majority of gifted students understand what is involved in solving social conflicts and cooperative interaction; however, they cannot transfer this concretely and have a difficult time carrying out such activities. This can often be attributed to a lack of practice (Berzonsky, 1981; Compton, 1984).

When gifted children are denied the opportunity to interact with children of other ability groups, chance meetings or interactions can become very frustrating for the adolescent. Communication is often hindered because of the differences in expressions and vocabulary (Winitzky, 1997). If the child makes the discovery that he is quite different from other students, "then the child misses peer acceptance as well" (Constable, 1989, p. 87). For this reason, "Children learn to hide or deny their abilities so as to fit in better with the other children. This may cause the gifted child to develop behavioral problems or psychosomatic symptoms such as stomach aches or headaches" (Rimm, 1986, p. 172).

Gifted adolescents require a lot of guidance and support. Their academic curriculum is very important; however, support for the social and emotional aspects of

maturing may be even more critical (Gallagher, 1996). A gifted child, like any other child, needs a well-rounded environment to help him understand his feelings and develop his self-concept. This social development can begin by teaching the gifted child how he is similar and different from other people. These children should be encouraged to “feel pride in their abilities, rather than guilt or anxiety” (Buchanan & Feldhusen, 1991; Feldhusen & Teffinger, 1985; Hall, 1983; Howley, Howley & Pendarvis, 1986; Shore, Cornell, Robinson, & Ward, 1991; Sloan & Stednitz, 1993, p. 205; Smutny & Blocksom, 1990; Terman & Ogden, 1951). The gifted child must learn how to accept and value those with different talents and abilities other than himself. They must be allowed to internalize and own their talents and understand how they fit into their school, community, and world (Maker, 1982; Taylor, Lloyd, & Rollins, 1971; Whitmore, 1980). Most researchers agree that all students must develop a sense of belonging within the school, and isolationism does not support such development.

Gifted students tend to lack “extra-perception” (Bireley & Genshaft, 1991). Extra-perception involves the ability to have a deeper understanding and more acute awareness of the social and interpersonal aspects of life. They are developed in an atmosphere that concentrates on high-ability academics and are themselves therefore centered on similar aspects (Sloan & Stednitz, 1993). “Because of their increased sensitivity to thoughts, actions, interests, and materials, there is often frustration with those who do not exhibit the same characteristics” (Rice, 1994, p. 34). For this reason, accelerated learners need to be placed in constant situations where they must interact with peers of different ability groupings. This will help them not only to develop a toleration of others, but it will give them an understanding of how to interact effectively with their school community. Such an academic setting will also enhance their ability to accept their own talents, and in turn

diminish their need to hide from others (Parkay & Stanford, 1992). This is displayed through “high standards of truth and morality, and these students are quick to judge those who do not measure up” (Alvino, 1994, p. 108).

It is common for gifted students to display high levels of emotional sensitivity or super-sensitivity. This makes them very aware of hypocrisy, double standards, untruths, and other forms of ethical contradiction. This same social and emotional sensitivity lends itself to a common obsession with perfectionism (Passow, 1979; Winitzky, 1997). The gifted child can become so concerned with accomplishment and excellence that often he is “unable to accept a product of high-quality, because it is not perfect” (Rice, 1994, p. 38). Perfectionism can become a problem not only in his own self-evaluation, but in the evaluation of his peers as well. The gifted child may tend to make his peers feel inadequate or unprepared and thus harbor resentment among his cohorts. The ideal social setting for these students would be one that assists them in developing criteria for judging the work of people of all ability groups (Alvino, 1994; Office of Program Policy Analysis and Government Accountability, 1996; Passow, 1979; Taylor, 1985). Adult guidance in developing coping strategies can assist gifted children in setting more realistic goals for themselves and others. Many researchers have found that “mixed-ability cooperative learning should be used for gifted and talented students, if for nothing other than the development of social skills” (Sloan & Stednitz, 1993, p. 205).

Middle School Setting

Research suggests a conflict between the philosophy of gifted education and the philosophy of middle school education. Seven compatible themes exist between gifted and middle school education: (1) problem-centered content, (2) content based on individual interests, (3) critical and creative thinking skills and problem-solving skills, (4)

social skills, (5) flexible scheduling and regrouping, (6) independent study, and (7) student interest activities (Chance, 1998).

Middle school years, typically between the ages of 10 and 15, represent an age period characterized by physical, emotional, and cognitive changes (Eichorn, 1966; George, 1984; Van Hoose & Strahan, 1988). The period was called “transescence” by Eichorn, emphasizing the fact that it is a transitional period of development linking childhood and adolescence. Eichorn labeled this time frame the transescence period because it is:

based on the many physical, social, emotional, and intellectual changes in body chemistry that appear prior to the puberty cycle to the time in which the body gains a practical degree of stabilization over these complex pubescent changes. (p. 3)

Eichorn further divides the transescence into three subdivisions: prepubescence, early adolescence, and adolescence.

In describing the middle school age student, physical characteristics and changes are often of primary focus. Van Hoose and Strahan (1988) differentiate the physical growth between middle school age girls and boys. They noted that boys and girls grow 10 to 20 inches on average and gain 40 to 50 pounds in weight. This growth is often uneven, and due to the rapid bone growth and slower muscle growth, this time period often lends itself to more frequent bone fractures and over-exertion muscle injuries. Other physical changes include increased activity of the sweat glands, changes in basal metabolism, and alterations in blood sugar stability (Chance, 1992). Alexander et al. (1968) also noted a wide variety of physical maturation during this time and that multiple years of physical growth actually exist within this short period of time.

Regardless of when a particular child reaches puberty, a marked acceleration in the rate of growth will occur before pubescence and

decelerate following pubescence. . . . The duration of time involved in the acceleration and stabilization period may range from three and one-half to five years. (Chance, 1992, p. 35)

Along with the physical changes of the middle school years come sexual developmental changes as well. Again, a substantial differentiation can be noted between the development of girls and boys. During this period, girls show breast development, begin the growth of pubic hair, and experience their first menstrual period. Boys experience the growth of sexual organs and pubic hair as well. "These changes will begin as early as 8¾ in girls and 9 ½ in boys" (Chance, 1992, p. 36).

The Carnegie Task Force on Education of Young Adolescents has made observations regarding the trend of adolescent development:

Youth enter puberty at a significantly younger age today than in previous generations. In the United States 150 years ago, the average age of a girl's first menstrual period was 16 years, today it is 12.5 years. . . . While they become biologically mature at earlier ages, many young adolescents remain intellectually and emotionally immature. (p. 21)

When considering the development of a middle school age child, one must also consider his social and emotional development. Self-concept, self esteem, and socio-emotional development are synchronous. Epstein (1973) characterizes self-concept as "self-theory" and defines it as "a theory that the individual has unwittingly constructed about himself as an experiencing, functioning individual" (p. 407). In addition, Beane and Lipka (1987) have applied the self-theory to the transience period and described it as follows: "The self-concept consists largely of perceived images of . . . developmental characteristics, transience may be viewed as a time when the self-concept undergoes virtual reconstruction" (p. 11).

The self-theory stage of adolescence is subdivided into three areas: specific situation, category/attributes, and general.

A thesis of Beane and Lipka's work was that self-theory developed largely in a social context but that for transescents, developmental characteristics of this age had a strong impact on self-concept due to changing physical, cognitive, and affective characteristics and the emergence of the increased importance of the peer group and the decreased importance of adults in the lives of early adolescents. (Chance, 1992, p. 37)

Erik Erickson (1968) developed the eight stages of human development. The adolescent period, as classified by Erickson, is known as "ego identity versus confusion."

Elkind (1970) described this developmental stage as:

the adolescent's newfound integrative abilities, his task is to bring together all of the things he has learned about himself . . . and integrate these different images of himself into a whole that makes sense and that shows continuity with the past while preparing for the future . . . versus role confusion and a sense of not knowing what he is, where he belongs or whom he belongs to. (Elkind, 1970, p. 88)

"Van Hoose and Strahan noted that young adolescents removed themselves from parents and family and that acceptance by peers became their central concern" (Chance, 1992, p. 38). Van Hoose and Strahan (1988) have described this period as a continual transition between child-like behaviors and adult-like behaviors.

Parents often describe transescents as belligerent, rude, angry, and defiant, while children have described their parents as too restrictive, old fashioned, and too demanding. . . . The young adolescent probably changes faster than the parents change their rules and adjust to the child's growth. (Lounsbury & Clark, 1990, p. 8)

"Middle school researchers have noted that many of the rules and regulations of the transescent's peer group center around wearing acceptable clothes, saying the right thing, and behaving according to the rules of their particular peer group" (Chance, 1992, p. 39). Elkind (1967) described the aspect of peer acceptance as the "imaginary audience."

The middle school movement emerged from the junior high concept, which was developed around 1910 (Chance, 1992). The Committee of Ten, in 1893, urged that

some subjects that were taken in high school should be taken earlier. They also recommended that elementary school be 6 years rather than 8 and that secondary education be 6 years rather than 4 (Melton, 1984; Vars & Lounsbury, 1967). The Committee of Ten wanted to improve the quality of work performed by those entering universities. From their recommendations emerged the concept of the junior high school. The report by the committee stated: "The junior period emphasis should be placed upon the attempt to help the pupil explore his own aptitudes and to make at least provisional choice of the kinds of work to which he shall devote himself" (p. 18). The committee further urged that the junior high period should be grouped by department and subject rather than grade. Thorndike (1906) and Hall (1905) also placed special emphasis on such a movement based on the idea that adolescents were characterized by individual differences in development.

The middle school movement in the 1960s was an impetus of reform urged by many educators (Alexander & McEwin, 1988). The reform was based on the major components of the junior high, combined with theories of adolescent development and grouping that best benefit middle school age students. Six functions of junior high school were identified by Gruhn and Douglas (1947): (a) integration, (b) exploration, (c) guidance, (d) differentiation, (e) socialization, and (f) articulation.

The middle school education era is characterized by the philosophy that "schools should be a place where close, trusting relationships with adults and peers create a climate for personal growth and intellectual development" (Carnegie Council on Adolescent Development, 1989, p. 37). Middle school proponents that the educational environment address social-emotional needs as well as physical and cognitive needs (Alexander, et al. 1968; George & Renzulli, 1997). The middle school years are crucial

for retaining students in school (Chance, 1992). Alexander et al. (1968) stressed three major components of middle school education: (a) personal development; (b) skills for continued learning; (c) organized knowledge. Other triad models of developing middle school education were developed by Lounsbury and Vars (1978), who advocated that core curriculum, continuous progress, and a variable component of exploratory and special interest classes be combined to develop a well-rounded model. Wiles and Bondi's (1981) triad model included personal development, social competence, and skills for continuous learning. "Areas identified as basic functions generally revolved around the needs of transescents in terms of cognitive, physical, and social-emotional development" (Chance, 1992, p. 54).

The focus of middle school education was the balance of cognitive growth, as well as emotional and social development. The dilemma was "how to successfully balance the conflicting demands of promoting student growth and development and still focus on student learning" (Merenbloom, 1988, p. 15). Exploratory or elective courses have been the heart of developing this balanced curriculum. Intramural sports programs have also been incorporated in many programs to assist in the development of team work, social skills, and sportsmanship (Eichorn, 1966).

The middle school concept should ensure that students experience success by offering new ways of organizing school routines (Lipsitz, 1984). Such organization prevents disengagement and promotes "a sense of membership, identity, and self-esteem" (Arhar, 1992, p. 144). Advisory provides a nurturing relationship with one caring teacher who monitors and supports students' educational, social, and emotional progress (George & Alexander, 2003). The organization supports successful student experiences through a team of teachers that work and plan together to provide a developmentally responsive

curriculum that meets the needs of all students (Carnegie Council, 1996; George & Oldaker, 1985; Johnson & Markle, 1986; National Middle School Association, 1996).

Middle schools designed to be developmentally responsive to early adolescents can help promote healthy life styles (Bush, 1999). The responsibility of health services has often been left to community agencies and guidance counselors. Middle school proponents have helped to develop programs to help early adolescents understand their own development, their relationship with their parents and peers, and characteristics of a healthy life style (Carnegie Council, 1996).

How students are taught has an underlying focus around the way each student's day is scheduled. Many middle school proponents advocate the use of flexible scheduling to allow interdisciplinary teams to schedule groups of students as they see necessary. However, most Florida middle schools are utilizing a strict six- or seven-period school day (George, 2001).

Tomlinson and George (2004) suggest that an underlying dichotomy exists in decisions regarding middle school gifted education. They believe that equity and excellence drive many decisions affecting how and what we teach in middle school, and specifically, gifted students. They emphasize that each student should an equal opportunity (equity) to a high level curriculum that is authentic, while at the same time those with advanced capabilities should have knowledgeable staff that maximize their potential (excellence). According to Swaim (2003), middle school proponents believe that the middle school curriculum should "engage every student in a relevant, challenging, integrative, and exploratory curriculum, in an environment that fosters respectful and supportive relationships among students, faculty, family and community" (p. 4).

Using Eichorn's transescent stage as a model, Compton (1982) suggested that the very nature of this developmental age may be a cause for underachievement of middle school gifted students. Gallagher (1985) estimates that the underachievement of the gifted students may range from 15% to 50%. The attempts by educators to decrease the underachievement and better meet the needs of gifted adolescents led to gifted and talented models that focused on differentiated curricula (Chance, 1992; Clark, 1992; Gallagher, 1985; Kindred, Wolotkiewicz, Mickelson, & Coplein, 1981).

Middle school advocates began looking at the grouping of all students, not just the gifted and talented. Johnson and Markle (1986) proposed that ability grouping had a negative effect on students, citing that it is "especially antithetical to the goals and objectives of the middle school" (p. 59). "Ability grouping has negative effects on teacher expectations and instructional practices, student perceptions of self and others, and on academic performance of lower ability students" (Chance, 1992, p. 55).

Eichorn (1966) recommended the use of flexible grouping based on mental, physical, and cultural factors. Alexander et al. (1968) also suggested the use of flexible grouping combined with a variety of other grouping practices, including independent study. Moss (1969), building on similar ideas of Eichorn and Alexander, developed a plan called "triple grouping." This plan combined individual, heterogeneous, and homogeneous grouping. Moss strongly advocated what has come to be known as the "house plan," which created schools within a school. It allowed for homogeneous grouping based on age and grade, with heterogeneous interaction based on ability, physical, and cultural perspectives.

Three major models of student grouping were proposed by Vars (1987): (a) interdisciplinary teams, (b) total staff approach, and (c) block-time or self-contained

classes. The most popular model, according to Vars (1987), was the team approach. An interdisciplinary team was composed of teachers from four to five core subject areas. The teaching team would have a common planning time, share a core group of students, and plan interdisciplinary units together. The team approach would allow the teachers to better focus on the whole child and look at social-emotional adjustment and development as well. George (2001) stated that “of all the components of the middle school concept, teaming is the one that school leaders refuse to give up” (p. 40). George also noted the cohesiveness that teaming brought to middle school education. He noted that teams brought identity to both teachers and students, centering around team names or mascots with which all student members can identify.

Advisory grouping was also identified as a vital part of the middle school curriculum to allow for social development through character education, team building, and the development of self-concept and self-esteem. Vars (1987) described block-time scheduling as a double period or an expanded amount of instructional time per subject area. This would allow for more hands-on learning, scientific method, research, and whole and small group interaction.

The National Middle School Association (1996) outlined six characteristics needed for effective middle school programs. These characteristics are: (a) educators committed to young adolescents, (b) a shared vision, (c) high expectations for all, (d) an adult advocate for every student, (e) family and community partnerships, and (f) a positive school climate.

Middle School Program Models

Alexander et al. (1968) focused his model of personal development through guidance and counseling, student activities, and continued learning. He recommended

that student guidance be delivered through a homeroom setting in which the teacher would have time during the day to devote solely to counseling activities. The idea was for the students to develop a strong relationship with one of their teachers with whom they could seek guidance throughout the year as needed. Alexander also proposed, as part of his model, that time is set aside using flexible scheduling to allow for social activities, such as clubs, student government, and intramurals. He also advocated abbreviated semesters for the exploratory classes so that students would have maximal exposure to a large variety of special interest courses. This model advocated team teaching, team planning, and continuous progress development.

George and Alexander (2003) emphasized a middle school delivery system that includes organizing teachers into interdisciplinary academic teams that allow for flexible scheduling that includes team/teacher autonomy. George and Alexander also advocated the use of a teacher-based advisory program for all students. This model suggests that the curriculum should be based on exploration and should build on all the concepts that were merely introduced in elementary school. This model proposes differentiated instruction to help encourage independence and responsibility. George and Alexander recommended flexible grouping and encouraged schools to explore a variety of grouping practices for middle-level students. Specialized teachers who are knowledgeable about adolescent development and subject area-specific create a faculty best suited for creating a student-centered rather than a subject-centered environment.

George and Alexander (2003) also proposed that middle schools create success experiences for all students and that the schools attempt to reconnect the home and community with the education of early adolescent learners. Improving health and physical education was also a component noted in this model of an *Exemplary Middle*

School. They also placed emphasis on shared decision making among the professionals of the school.

Beane (1990) recommended that middle schools address problems and concerns of the average adolescent student. He also suggested that those themes be combined with the general education curriculum. He proposed that middle school teachers be sensitive to student needs in these areas. Beane placed emphasis in this model on team teaching with collaborative teacher planning and heterogeneous grouping plus flexible scheduling (Chance, 1992). Beane defined “heterogeneous grouping” as “grouping regardless of ability, school achievement, home background, gender, race, class, personal aspirations” (p. 56). Beane ascertained that gifted labels, as well as learning disabilities, would not affect the heterogeneous grouping.

Eichorn (1966) proposed a socio-psychological model based on flexible scheduling, team teaching, and grouping of students by teams. Eichorn’s model focused on skill development of cognitive skills required for progress, as well as acquisition of social skills. This model also placed emphasis on an intramural program and interest activities for students during the school day.

Lounsbury and Vars (1978) advocated the block scheduling approach. They proposed cross-grouping according to age and flexible scheduling. This model allowed for continuous progress and individual acceleration, enabling students to move through the curriculum at their own rates. Lounsbury and Vars recommended a non-graded approach that was also focused on community involvement and social activities. The role of teachers as guidance was also stressed in this model. Thematic, interdisciplinary units played a large role within this set-up. Block scheduling would be utilized at opposite times to facilitate cross-age scheduling and multiple subject interaction.

Under the category of delivery systems, the theme of team teaching and team planning appeared in all four models. Three of the four models recommended that content be organized in thematic, interdisciplinary units” (Chance, 1992, p. 96). Other common middle school delivery model themes included flexible scheduling. These encouraged physical activity, as well as social and personal development activities.

The National Middle School Association [NMSA] (2003) proposed that successful schools for young adolescents provide a culture that breeds success. This culture of success is created by utilizing developmentally appropriate curriculum and instruction delivery in an environment that focuses on the needs of the young adolescent. The NMSA advocates these characteristics of a successful school for young adolescents:

1. educators who value working with this age group and are prepared to do so
2. courageous, collaborative leadership
3. a shared vision that guides decisions
4. an inviting, supportive, and safe environment
5. high expectations for every member of the learning community
6. students and teachers engaged in active learning
7. adult advocate for every student
8. school-initiated family and community partnerships.

NMSA (2003) also suggested that effective schools for adolescents provide a curriculum that is relevant, challenging, integrative, and exploratory. They propose that multiple learning and teaching approaches be utilized to respond to diversity. Assessment and evaluation programs should promote quality learning. Organizational structures should support meaningful relationships and learning (Bruner, 1960).

Schoolwide efforts and policies should foster health, wellness, and safety. The NMSA also strongly advocates the use of multifaceted guidance and support services.

The Carnegie Council on Adolescent Development (1996) advocated middle school reform to help connect schools, communities, and families. They proposed that middle schools be more intellectually challenging and provide opportunities for adolescents to learn about themselves. The Carnegie Council also emphasized the use of team teaching and cooperative learning for students, along with academically supervised community service. They also noted that middle schools should integrate students of varying ability levels in a single classroom.

The Carnegie Council on Adolescent Development (1996) proposed eight principles for transforming the education of young Americans:

1. create communities for learning
2. teach a core of common knowledge
3. provide an opportunity for all students to succeed
4. prepare teachers for the middle grades
5. improve academic performance through better health and fitness
6. re-engage families in the education of adolescents
7. strengthen teachers and principals
8. connect schools with communities.

Gifted Program Models

The gifted program is designed to educate talented students through the use of accelerated curriculum and enrichment activities. The program is aimed at students who qualify based on an IQ score of 130 plus-or-minus 1 standard deviation of 3. The program focuses on development of the student's full academic potential as well as

preparing him to be a future leader. The gifted program is delivered in multiple settings. Local conditions primarily determine which kind of program is likely to be the most effective. In deciding the program delivery model, four major issues have been identified as determining factors in policy decisions regarding program implementation (Ward, 1979):

1. major sex, racial, and ethnic differences in the proportions of students identified as "gifted and talented"
2. a variety of interpretations of "giftedness" and therefore a variety of measurement/qualification and identification options
3. a lack of systematic and suitable curriculum material for the gifted and talented in all subjects
4. overwhelming patterns of the chronic underachiever.

The students may be in regular classrooms and pulled out during the day for enrichment activities. The second approach is an inclusion model where the regular education teacher offers accommodations and enrichment through a standard education, heterogeneous classroom. The third model is a homogeneous classroom setting that isolates the gifted students throughout the day in a self-contained setting with an exceptional education teacher.

The special class program or "homogeneous grouping" can be utilized throughout the whole day or just part of the day.

As a rule, programs that have achieved demonstrable success group their gifted children together for some part of the school day, have personnel who are sophisticated in the content and skills the gifted should develop, and enjoy the support of the school administration. . . . This plan provides an intensive program, but some feel the children have insufficient association with non-gifted children. (Gallagher & Weiss, 1983, p. 22)

The modified special class allows the children to spend part of the time with their age- level peers, as well as their intellectual peers. They spend part of the day in a

resource room with a trained instructor in gifted education best practices. This model allows for the stimulation of intellectual and social development. Research varies as to the exact amount of time necessary for the grouping to be effective (Gallagher & Weiss, 1983).

The mentor model is another approach to gifted education. This model is primarily utilized in California and Florida. This allows the gifted students to spend time with experts in different careers, and they can work as part-time interns or apprentices in the field while earning academic credit. The students receive guidance and counseling throughout the process. (Kaplan, 1974)

Out-of school programs have become increasingly popular among gifted education. An example of such a program is one organized by the Gifted Child Society in New Jersey. The program offers Saturday workshops that are enrichment courses in math, science, and the humanities (Kaplan, 1974). Another example of an out-of school model is in North Carolina, the first program of this type. This residential program creates six- and eight-week classes over the summer. The top intellectual students are invited to participate in enrichment activities (Kaplan, 1974).

Fiedler, Lange, and Winebrenner (2002) identified six major myths regarding gifted education and program delivery.

1. Tracking and ability grouping are basically the same practice.
2. Ability grouping is elitist.
3. Ability grouping inevitably discriminates against racial and ethnic minority students.
4. Gifted students will make it on their own; grouping them by ability does not result in improved learning or achievement for them.
5. Providing heterogeneously grouped cooperative learning experiences is most effective for serving all students, including the gifted.
6. Assuring that there are some gifted students in all classrooms will provide positive role models for others and will automatically improve the classroom climate.

Fiedler et al. (2002) dispel these myths by first stating that the practice of tracking involves assigning students to groups for predetermined curricula to be delivered to each group based on predetermined criteria. Ability grouping, however, may change from year to year and class to class and allows for a reference point from which the teachers can prepare their curriculum. In reference to ability grouping being “elitist,” Fiedler et al. (2002) addressed the following idea:

Gifted students may be better at many academic tasks, but this does not imply that they should be seen as being better than anyone else. The truth is that most educators of the gifted work diligently to help develop an understanding of giftedness in the context of individual differences rather than as an issue of superiority versus inferiority. (p. 44)

Educators have made great strides in improving the identification of minority students for gifted and talented programs, and national mandates have added to such efforts, according to Fiedler et al.

Fiedler et al. (2002) addressed the myth of grouping gifted students by stating that “educators have known for years that gifted students benefit cognitively and affectively from working with other gifted students” (p. 10). Gifted students do not always benefit from cooperative learning groups based on heterogeneous grouping. Many times they have already mastered what is being taught, and teachers become tempted to use them as helpers, and thus they do not benefit from the activity, according to Fiedler et al.

Some school districts still employ the ideology of the early 1900s that included acceleration for gifted learners. An example of an acceleration plan is as follows:

<u>Grade Level</u>	<u>Acceleration</u>
Primary (K-3)	Early admission Ungraded primary
Intermediate (4-6)	Ungraded classes Grade-skipping

<u>Grade Level</u>	<u>Acceleration</u>
Junior High (7-9)	Shorten 3 years to 2
Senior High (10-12)	Extra class load Courses for college credit
College (13-16)	Early admission to college honors program

The long-standing practice of “grade skipping” has continued to exist based on the theory that “gifted children can condense school requirements with no difficulty and with superior performance” (Gallagher, 1979, p. 44). The idea of acceleration has slowly faded during the past 20 years. Palcuzzi (1979) asserted his views of integrating acceleration with specialized instruction:

1. Children should be grouped by ability.
2. Part of the school day should be given over to special instruction.
3. Talented students should be allowed time to share their talents with children of other schools in the area or throughout the state (transportation will be provided).
4. A child should be advanced according to his talents, rather than according to his age.
5. These children should have special teachers, specially trained and highly salaried.

Gifted students perform at very high levels in many academic fields. These students require special activities and services that would not ordinarily be provided to other students of their age or grade level in order to maximize their capabilities (Anthony, 1994). This requires instruction in basic subject matter at a level and pace that meets their academic needs. In order to accomplish this goal, many educators have established a homogeneous environment for these accelerated learners. This homogeneous classroom includes only gifted students within their age or grade level. This environment provides for stimulation of higher level thinking and enrichment learning experiences.

However, it deprives these students of the opportunity to develop adequate socialization skills. These skills include peer interaction and cooperation with students of all ability levels, peer evaluation, self-evaluation, self-esteem, and connectedness with the school environment (Smith, 1995).

Homogeneous Classroom

The homogeneous classroom—in the case of gifted education—is based on ability grouping. This setting involves placing all students of a high-ability or “gifted” status into one classroom. The students are placed by age or grade level. This would be in contrast to a typical classroom where any given teacher may have 50% of his students performing at an average level, with 25% below average and 25% above average. Mixed grouping is considered a heterogeneous classroom. In a homogeneous gifted environment, students are grouped with their gifted peers and perform all their daily tasks and activities within the realm of that group. This is also referred to as a “self-contained gifted classroom.”

“The most serious consequence is that students so labeled are taught to feel inadequate, inferior, and limited in their options for growth” (Parkay & Stanford, 1992, p. 340). Whenever students are grouped by ability and placed within a homogeneous environment, “there is danger that some group labels can evoke negative expectations, causing their peers to isolate or reject them” (p. 341). Due to this type of grouping, gifted students have been the target of many myths and stereotypes. These stereotypes label the gifted child as “uncooperative,” “boistrous,” and “impersonable,” thus making it difficult for outside students or teachers to open up to them.

Many middle schools maintain an educational model for the gifted education program that offers gifted students little or no outside exposure to students of other ability

groups. This is especially true in the case of elementary schools, where these students even participate in music, art, and physical education classes within their own homogenous group (Chance, 1992). They must sit together as a class during their lunch period and even tend to have recess at an isolated period from the rest of the school. This type of daily routine limits these students' ability to feel a part of the school community, which is required as an integral part of their own social development (Elkind, 1967).

The common conception of educators is that gifted students do not communicate well with lower ability students, and they become frustrated by such interaction. However, it seems that the frustration is a by-product of the lack of integration. Students do not learn their multiplication tables by reading them from a book and watching the numbers from afar. They learn them through practice, repetition, and hands-on interaction with the numbers (Alvino, 1994). The same is true for teaching socialization skills. The students must have practice interacting with students of other ability groups. They need to have the opportunity to work with other students solving problems and doing integrative tasks (Rimm, 1986).

Society is not a homogenous environment, and if a gifted child is going to function in this world, he must learn how to act cooperatively with all ability groups. The central focus of education is to prepare students to be active as adequately functioning citizens within society. It seems that the educational system is doing them an injustice by inhibiting their access to all walks of life. Therefore, the institution itself is contributing to the frustration that gifted students feel when they try to interact with students outside their homogenous realm (Alvino, 1994).

Gifted students tend to have a harder time adjusting to high school and other secondary institutions (Sloan & Stedtnitz, 1993). This difficult adjustment is partly

because gifted students become very comfortable within their inner circle of other gifted students. When gifted children enter the middle school, this becomes even more pronounced. When they make the move to high school, it is very difficult for them to adjust to being outside of this group and in classes that consist of all ability levels, since most high schools do not offer a gifted program. This change in setting can cause the students to become extremely introverted and nervous about expressing their own knowledge (Constable, 1989). Quite frequently, the problem not only becomes their inability to communicate with their peers but also their hesitancy to share knowledge and ideas. This manifests itself during paired or group activities and projects (Sloan & Stednitz, 1993). "Ability grouping works against democratic egalitarian norms, and is socially ineffective" (Braddock & Slavin, 1989, p. 38). Braddock and Slavin also state that research evidence does not support the belief that ability grouping enhances a student's self-concept. Gifted students typically enter the program around third grade, they stay with relatively the same group of students during all of their elementary school years and are grouped considerably the same in middle school. Braddock and Slavin concluded that the most effective way to integrate gifted students socially would be to "organize for instruction using cooperative learning groups involving individual accountability and group goals" (p. 15). Heterogeneous grouping can enhance achievement because of the more productive interaction that will occur within the groups (Winitzky, 1997).

Clark (1992) established a gifted education delivery model based on the interacting spheres theory of intelligence encompassing the four major intellectual components: (a) thinking, (b) intuition, (c) feeling, and (d) sensation. This model was centered around a heterogeneous classroom setting. The program would utilize a gifted program

coordinator to oversee all major program scheduling and development. Clark also emphasized the compatibility of this program with an open-education model that would include multi-age grouping. Clark's model encouraged individual learning outside of the regular classroom, as well as access each day to intellectual peers through enrichment pull-out programs. Cooperative planning involving the student, teacher, and parent was encouraged in this model, as well as flexible scheduling and grouping for social activities, such as leadership training, student government, and peer mentoring.

Gallagher's (1985) delivery system model for gifted education is based on a modified learning environment that might include: (a) enrichment in the regular classroom, (b) consultant teacher, (c) resource room, (d) mentor, (e) independent study, and (f) special interest classes or schools. This model encourages an open-ended, constantly changing learning environment that encourages student selection of curriculum and activities. Gallagher encourages independent study and individualized assignments and tasks for the gifted learners. Flexible scheduling is also incorporated to encourage socialization skills through peer interaction in leadership activities. A specific focus is placed on the gifted underachiever, and a specific counseling and classroom modification component is established to foster the development of the gifted underachiever. This model also places emphasis on a diverse student population, including identification of minority students for gifted education programs, as well as counseling services to assist minority students in developing their individual talents.

The gifted education delivery model presented by Kaplan (1974) presents a more segregated or homogeneous setting for gifted students. Kaplan suggests that gifted and talented students spend time with their intellectual peers at various times throughout the

day. Kaplan also suggests that the gifted students spend a portion of their day interacting with students of various ability levels. This type of heterogeneous interaction can take place by providing enrichment and individualized program instruction for gifted students within the regular education classroom. The Kaplan model places emphasis on outside enrichment activities that allow for multiple class groupings and provide activities that are an extension of the regular classroom curriculum. This Kaplan model also allows for multi-age grouping and continuous progress learning in which students are allowed to enter into learning experiences based on their individual ability rather than on their age or grade level. Unlike some other models that have been reviewed, Kaplan accepts the use of acceleration in this model via early entry, double promotion, advanced placement courses, and multi-age grouping. The model presented by Kaplan also provides for identification and intervention for underachieving gifted students as well as minority students. This intervention program can be accomplished through off-campus enrichment and apprenticeships.

Kaplan (1974) also provides for differentiated instruction as well as a differentiated curriculum within the regular education classroom. Flexible scheduling should be allowed to provide students the opportunity for leadership and social development, as well as independent and self-directed study. Access to experts, according to Kaplan, is an important part of students obtaining real-world applications to their studies to help the gifted students find meaning in their learning.

The Schoolwide Enrichment Model, as presented by Renzulli & Reis (1985), offers a more wide-range approach to educate high-ability students. Renzulli's plan focuses on the top 15% to 20%, as opposed to the typical 3% to 5% represented in most gifted and talented programs. Renzulli (1978) focuses on increasing the talent pool based on

general ability or specific performance areas. The enrichment experiences, as described in this model, involve activities such as guest speakers, learning centers, and regularly scheduled enrichment activities. Renzulli recommends that a resource teacher be scheduled to assist the students at a ratio of 60 to 70 students per teacher. Individual education plans and records should be continuously reviewed and revised to formulate the best plan for each student.

The enrichment model, as proposed by Renzulli & Reis (1985), also suggests that the analysis of students in the gifted education talent pool should be based on interests, strengths and learning styles. A thorough assessment of student interests will assist the enrichment committee with developing interest centers for students, as well as individualized enrichment activities. The enrichment committee would be comprised of faculty and staff members throughout the school and across disciplines, and thus would require extensive involvement by teachers and support staff. In-depth individualized or small-group investigations would be based on extreme student interest and task commitment that would be coordinated by the resource teacher and monitored by the teacher or mentor. Outside experts, as suggested by Renzulli, should be brought in as field experts to provide exploratory activities.

Taylor (1986) proposed a gifted education delivery model that primarily focuses on using the current subject matter in regular classrooms to develop each student's talents. Taylor recommends the use of a biological screening tool to focus on multiple talent areas and to identify students from multiple talent pools. Taylor, Lloyd, & Rollins (1971) proposes that extracurricular activities should be a part of the regular education curriculum and that these should be related to career or life activities. The primary focus of this model is delivery of the gifted program through the regular education classroom,

with specific focus on talent identification and enrichment throughout the entire school curriculum.

The gifted education delivery model, which was developed by Treffinger (1986), is based on individualized planning and programming for gifted students. Treffinger suggests that the highest students be targeted, based on above-average ability, creativity, or task commitment. The primary delivery of the gifted program would be through the regular education classroom. However, multivariate grouping would allow for variable progression rates within each regular classroom. Individual or independent study time, as well as enrichment activities, would be planned around each student's abilities and interests and delivered within the regular education classroom. Community resources would be utilized as mentors and/or field experts.

Treffinger (1986) emphasized the importance of assessment for gifted students and recommended the use of outside agencies and experts to assess advanced projects or activities. This model also calls for a gifted resource specialist within each school. The specialist would work with staff to plan for individual accommodations, locate resources, provide enrichment opportunities, and offer inservice to teachers. The individual plan for each student would be determined by the team consisting of the regular education teacher, the gifted resource specialist, and outside assessment agency.

Treffinger's (1986) plan makes provisions for intellectual peer grouping and advanced or accelerated classes with in-depth coverage of content. The model recommends placement by instructional level versus age or grade level. Treffinger places emphasis on the personal and social growth of gifted and talented students as well. Portfolios and individual programming options offer a truly individualized approach to gifted education.

Some common themes existed among these major gifted education delivery models. All the models suggested that gifted programs utilize enrichment activities within the regular education classroom (Chance, 1992). Flexible scheduling and regrouping of students were also popular options in a majority of these models to help accommodate for intellectual peer grouping and individual and small group instruction. “Common recommendations for delivery systems also included the use of apprenticeships, mentors, and outside experts” (Chance, 1992, p. 130). Common to many models was the idea that teachers should be highly qualified and skilled in teaching middle grade students as well as in creating a student- centered environment that allows all students to succeed. Exploratory and student interest activities were also a recurring theme from these theorists.

Some common options are discussed that pertained to the delivery of gifted education within the middle school education model. “Flexible scheduling and regrouping of students was recommended by all middle school education models and by four gifted education models” (Chance, 1992, p. 132). Individual study and self-pacing were mentioned by a majority of the middle school models, as well as the gifted education models. Student interest activities, a team approach to developing a student’s education plan, and attention to personal as well as intellectual growth were also primary themes in most of these models. Total school enrichment activities and interest activities were mentioned as themes for middle school and gifted education students within all classrooms.

Alternatives to the Homogeneous Classroom

The literature indicates that a viable alternative to the homogeneous gifted setting would be to place these students in all-inclusive environments. Merely placing students

in a particular setting or providing them with a particular set of activities does not necessarily lead to success (Gallagher, 1993). Gifted children need to be well-rounded and encompassed with interaction at all levels. Research does not fully discount the idea of ability grouping. Ability grouping, however, according to Gallagher, would be used sparingly and implemented along with other forms of grouping. Some middle schools have implemented programs where gifted students meet in specialized settings for math and reading but are kept with regular education classes for the rest of their day's activities. The literature supports the use of such programs. This allows the students to receive extra attention and challenging instruction in these fields, while still allowing them the opportunity to socialize and integrate with their peers of other ability levels. This may also cut down on the frustrations that gifted children feel with each other.

"Gifted" is defined in many ways and through many subject areas. Some children are highly gifted in one area but not others. They may begin, therefore, to feel inferior and isolated among their peers who may be very well rounded and gifted in most areas. Mixed ability grouping with isolated pull-out programs gives students the challenges and enrichment that they need to perform at high levels, but not taking away from their interaction with peers at their own ability level and below (Alexander, 1992; Rice, 1994).

Gifted students represent a body of children who have the capacity to perform at very high levels. Research has indicated, however, that these educationally elite are being deprived of the very bare essentials of a productive social life. When gifted children are placed in homogeneous classrooms, they are not being given the experiences or taught the skills that will allow them to function adequately in a heterogeneous society. Because our society is pluralistic, it is vital that educators teach our youth, even the brightest, how to interact and function within this realm. Failing to introduce gifted

students to peer interaction and cooperation with people at all levels leads to the frustration that is experienced by these students when dealing with students they feel are below their capabilities. That frustration leads to unhealthy and unproductive social interaction. In society, we cannot always choose those with whom we wish to work or do business. For these reasons, educational institutions must prepare all youth to develop socialization skills that will allow them to adapt to a variety of intellectual levels and function within this society.

Differentiated Curriculum

A differentiated curriculum is often addressed when referring to the education of the gifted and talented. A differentiated curriculum, as described by Tannenbaum (1983), is often referred to as “enrichment.” Tannenbaum defines enrichment as “a unique curriculum distinguishable from the general scope and sequence of studies . . . having a comprehensive plan with its own built-in rationale” (p. 373). Three major characteristics must be considered when determining a differentiated gifted and talented education program: curriculum, instructional models, and delivery system (Fox & Washington, 1985). Tomlinson (1995) emphasizes four important characteristics of an effective differentiated classroom:

1. Instruction is concept focused and principle driven. All students are given the opportunity to explore and apply key concepts of the subject being studied. This instruction stresses “sense making” rather than retention and regurgitation.
2. On-going assessment of student readiness and growth is performed.
3. Flexible grouping is consistently used.
4. Students are active explorers, utilizing goal setting.

Renzulli and Reiss (1985) proposed the Enrichment Triad Model that was an all-inclusive schoolwide enrichment program. Renzulli identified three types of school

experiences within his triad model. Type I activities were general activities that would be available to all students, not just the gifted and talented. These activities were designed to spark student interest and offer them exposure to new topics and ideas that would not typically be covered in the regular curriculum. The delivery of Type I activities would take place within the regular education classroom. Type II activities, also available to all students, would inspire and encourage higher level thinking. Type II activities would be conducted in the regular classroom and/or a resource room for gifted students. Type III activities would involve small group or individual instruction and interaction in which students would research and investigate topics of personal interest. Type III activities would be conducted in a gifted resource room (Renzulli & Reiss, 1985).

Tomlinson (1995) recommended several practices to ensure effective differentiation for gifted students within the middle school setting to include the following:

1. the use of multiple texts and supplementary materials
2. the use of computer programs
3. interest centers
4. learning contracts
5. compacting
6. tiered, sense-making activities
7. tasks and products designed with multiple intelligence orientation
8. independent learning contracts
9. complex instruction
10. group investigation.

The uniqueness of Renzulli's model is that it proposed that such instruction would provide best practices for all students. Renzulli proposed that this model would encourage gifted thinking to a larger number of students. He also suggested that such a model would limit socialization concerns, such as self-esteem and elitism, and would offer a well-rounded program for gifted children and adolescents. "This model has been designed to provide an organizational plan for achieving these goals through the maximum utilization of both specialists and the general faculty" (Renzulli & Reiss, 1985, p. 4).

Feldhusen (1989) identified categorical programming options for gifted education at both the elementary and secondary levels. At the elementary level, Feldhusen cited the following models: pullout classes; differentiated instruction within the regular education classroom; cluster grouping; after-school or summer enrichment classes; full-time self-contained classes in regular classrooms; special class offerings, such as art, music, computers, dance; and foreign language. Feldhusen identified the following models at the secondary level: honors classes, acceleration, magnet schools, mentorships, and enrichment seminars. Researchers have studied program delivery models for gifted education for several decades. They have been able to develop a list of existing models utilized in the U. S. (Cox, et al., 1985, p. 30):

1. enrichment in the regular classroom
2. part-time special classes
3. full-time special classes
4. independent study
5. itinerant teacher
6. mentorships

7. resource rooms
8. special schools
9. early entrance
10. continuous progress
11. nongraded school
12. moderate acceleration
13. radical acceleration
14. College Board and advanced placement
15. fast-paced courses
16. concurrent and dual enrollment.

In the new millennium, the word of choice is “inclusion” for all special education students. Many schools are opting to educate their gifted students in regular education classrooms. Robert Slavin, Director of The Johns Hopkins University Center on Effective Schooling for Disadvantaged Students, proclaimed:

It's best to accommodate gifted children within the context of the regular heterogeneous classroom. I would not agree that it is such a terrible thing that the separate gifted programs are going by the wayside. I see no reason at all to provide separate gifted programs at any level. (Shields, 1994, p. 33)

In some large school districts, every interdisciplinary team within the middle school setting is an interdisciplinary teams. These include a number of special education students on each team (George, 2001).

David French, Director for Student Development of the Massachusetts Department of Education, is withholding funds to discourage schools from putting children in different classrooms based on their ability (Shields, 1994). Gifted education is currently not mandated in half of the states and typically benefits only 3% to 5% of the nation's

children. These reasons have also provided a backdrop for budget cuts and restraints that cause the elimination of more traditional programs. In the early 1980s, the education reform movement was stressing economic competitiveness, as it did in the Sputnik era in the late 1950s that created a small boom for gifted education programs. However, “presently a number of education reforms have called for an end to traditional classroom practices of grouping students by ability” (Gallagher, 1985, p. 18). Tomlinson and George (2004) note that middle grades grouping is most likely effective when (a) heterogeneity is emphasized; (b) teachers are effectively supported in teaching high quality, meaning-making, expert-focused curricula in heterogeneous settings; and (c) teachers are effectively supported in attending to learner variance within their classes. Their belief is that “the issue is not so much where we put students as the quality of what we do with them” (p. 9).

Relevant Research

This review of relevant research in middle school and gifted education provided insight into current and past trends in both fields. Research in these fields was the background for the development and direction of this study and offered a standard of comparison for the results.

Guerrero (1995) examined the extent to which trained teachers could effectively implement advanced instructional techniques and curricula for gifted students in a heterogeneous middle school environment. There was little evidence of instructional differentiation in depth, complexity, novelty, or acceleration for advanced and gifted learners. Teachers tended to underestimate their students' readiness for more sophisticated instructional experiences. Guerrero's study indicated that gifted learners did not receive differentiated instruction at any level within the heterogeneous environment.

The Chapter 2-Carnegie Middle School Project was designed to develop educational programming and to provide appropriate services to advanced and gifted learners within the restricted middle school environment. Data were collected through field notes and unstructured interviews covering seven categories: (a) teacher assessment, (b) teacher self-perception of professional growth, (c) academic challenge, (d) curricular decisions, (e) instruction, (f) classroom environment, and (g) classroom management.

Gallagher and Coleman (1995) looked at the perceptions of 175 gifted education teachers and 147 middle school teachers concerning gifted education needs. Gifted educators disagreed with proponents of cooperative learning concerning student needs and disagreed with middle school educators on the value of ability grouping and the social consequences of being labeled as gifted. The survey focused on six interest clusters: (a) grouping strategies, (b) identification issues, (c) curriculum modifications, (d) teacher preparation, (e) program evaluation, and (f) emotional/social needs of gifted students. Educators of gifted students felt more strongly that the regular curriculum was not challenging enough for gifted students, that programs for gifted students should address their emotional needs, and that middle school teachers need more staff development in the characteristics and needs of gifted students. Educators of the gifted ranked their top three priorities as curriculum, teacher preparation, and appropriate identification; while middle school educators selected curriculum, grouping practices, and teacher preparation as most important.

Neba, Fisterwald, and Urban (2001) studied the extent to which grouping affected the achievement of gifted students in the middle grades. The study looked at whether gifted students were best served by heterogeneous or homogeneous grouping. The study found that cooperative learning offers strong potentials for further improving the quality

of instruction with gifted and high-achieving students. The study concluded that interaction of gifted students with gifted and non-gifted peers throughout their school day provided the optimal academic environment.

In 1997, Cohen published results from a study of middle school gifted education teachers. The purpose of this study was to examine whether peer coaching was perceived by participating middle school teachers as a useful professional development technique for the acquisition of curricular and instructional differentiation strategies for high-ability and high-achieving students in the regular classroom. Findings from this study supported the use of the principles of peer coaching. Data indicated conflicting perceptions among teachers, students, and parents about the amount of challenge and differentiation initially provided to high-ability middle school students.

Plucker and McIntire (1996) conducted a qualitative research study that examined behaviors and strategies used by 12 high-potential middle school students when they did not feel challenged in school. They found that students engaged in the following behaviors: selective attention, focused curricular involvement, involvement with others, humor, participation in extracurricular activities, and lack of effort/selected effort. Few middle school teachers associated these behaviors with lack of challenge. The teachers had received little training in motivation of high-ability learners.

Sicola (1990) studied the emphasis of middle school philosophy on heterogeneous grouping in relationship to the needs of gifted learners. Arguments supporting such grouping based on developmental needs of young adolescents, social discrimination, and the need for positive role models were considered. Cooperative learning was seen to be an unproven instructional method with this population. Sicola found that heterogeneous

grouping worked best with adolescents. Differentiation of curriculum was explored to assist students in achieving instruction within the regular education classroom.

Ascher (1992) conducted research on tracking in middle schools. The study found that many schools were moving away from tracking. The greatest concern among both parents and educators was that heterogeneous grouping may slow down the learning of high-achieving students in view of the evidence that high achievers do better in accelerated classes for the gifted and talented. The conclusions of the study pointed out that the benefits these gifted students experienced were not from the homogeneity of the group but from their enriched curriculum and that lower track students would also thrive on the same enriched curriculum, given sufficient support.

The review of literature found that middle school models, which have their historical roots in the earlier junior high school movement, are grounded in the constructs of human development. Middle school models have been designed to attend specifically to the cognitive, social, emotional, and physical development needs of early adolescents. The middle school movement is primarily focused on assisting adolescents to develop emotionally and socially in an academically sound environment. The movement has encouraged the promotion of school pride, social and emotional awareness, and teacher and subject cohesion.

The literature review showed that models of gifted education have been based on the constructs of intelligence and creativity. The gifted education models have been developed in order to provide appropriate educational opportunities for highly intelligent and creative individuals. Gifted education theorists have encouraged homogeneous groupings to assist with academic development and heterogeneous groupings to

encourage socialization and cooperative learning. Gifted education encourages differentiated curricula and expanded educational opportunities and curricula.

CHAPTER 3 METHODOLOGY

This study addressed the problem of identifying components of both middle school education and gifted education that are compatible across both sets of models. The specific focus of this study was on program delivery models. Delivery systems incorporated components that were related to scheduling and organization of both academic and co-curricular activities as well as other student support services (Chance, 1992). A component was identified as part of the delivery system if it referred to organization, scheduling, or structure of the total school environment or if it referred to student support services, total school programming, or staffing decisions.

Statement of the Problem

This study was designed to investigate the presence of consensus-based components for gifted education within a middle school setting. Specifically, the study addressed the following questions:

1. What are the major components identified by existing middle school models?
2. What are the major components identified by existing gifted education delivery models?
3. What categories are compatible themes across both gifted education and middle school education delivery models?
4. What components of middle school education and gifted education are present in the middle schools of a large Central Florida public school district?
5. What components of middle school education and gifted education most frequently occur in conjunction with one another?

This chapter describes research methods, population and setting, sample and instrumentation, and data analysis. The purpose of this study was the identification of compatible themes that exist between gifted education and middle school education.

The following questions were addressed in this study:

Question 1: What are the major components identified by existing middle school models?

The data analyzed in the first question of this study consisted of written documents; therefore, the research methodology utilized was content analysis. "In general, content analysis applies empirical and statistical methods to textual material" (Lindkvist, 1981, p. 34.) Holsti (1969) describes content analysis as:

A good research design makes explicit and integrates procedures for selecting a sample of data for analysis, content categories, comparisons between categories, and the classes of inference which may be drawn from the data. (p. 25)

The consideration of sampling procedures was a major criterion for this portion of the study. The selection of models for middle school education began with surveys of texts cited in the review of literature that met the criteria: (a) that they were written as a survey of a variety of models and (b) that they presented a general view of middle school education.

A second consideration in designing the content analysis of this study was the selection of categories that were used as a basis for analysis. Holsti (1969) stated that "categories should reflect the purpose of the research, be exhaustive, be mutually exclusive, independent, and be derived from a single classification principle" (p. 95). Holsti identified the most important criteria for selecting categories for content analysis as adequately reflecting the research question, and he added that "familiarity with one's data is an important asset for developing valid and reliable categories" (Holsti, 1969, p.

95). Thus, for the purpose of the study, the category selected for review was limited in scope to that of program delivery models. Curriculum and instruction (the other major categories identified in the literature) were not reviewed because the focus was on the delivery of middle school gifted education.

Holsti (1969) ascertained that “for many purposes the theme, a single assertion about some subject, is the most useful unit of content analysis” (p. 116). Since the purpose of this study was to identify themes of a model that fall into the identified category, the term “component” was utilized as the label for the individual part of each model that pertains to the category of program delivery.

Lincoln and Guba (1985) discussed reliability as “typically demonstrated by replication, if two or more repetitions of essentially similar inquiry processes under essentially similar conditions yield essentially similar findings, the reliability of the inquiry is indisputably established” (pp. 298-299). One way that Everson and Green (1986) noted that reliability can be obtained is by coding the data a second time. Bowers and Courtright (1984) established that “stability in measurement across time is inferred from intraobserver reliability” (p. 115). Intraobserver reliability is defined, according to Becker (1983), as “the degree of agreement of a rater with himself when he judges or unitizes or categorizes, with himself when he judges or unitizes or categorizes the same object at different times” (p. 116).

The middle school models used were proposed by William Alexander et al. (1968); James Beane (1990); Donald Eichorn (1966); and John Lounsbury and Gordon Vars (1978); Paul George and William Alexander (2003); The National Middle School Association (2003); and the Carnegie Council for Adolescent Development (2003).

Question 2: What are the major components identified by existing gifted education delivery models?

Samples of gifted education models were selected from documents that presented a general view of gifted education and surveyed a variety of models. The consideration of sampling procedures was a major criterion for this portion of the study in which models for gifted education were selected for analysis.

Other considerations in designing the content analysis for gifted education delivery models were identical to those discussed in Question 1 above for middle school components.

This study selected the gifted education models proposed by Barbara Clark (1992); James Gallagher (1985); Sandra Kaplan (1974); Joseph Renzulli & Reis (1985); Calvin Taylor (1978); and Donald Treffinger (1986).

Question 3: What categories are compatible themes across both gifted education and middle school education delivery models?

Content analysis research requires that data be compared to other data (Holsti, 1969). One comparison that can be made with content analysis is comparing the messages produced by two or more different sources (Chance, 1992). In this study the components of gifted education program delivery models and middle school education program delivery models were compared. The purpose of this class of comparisons is to “relate theoretically significant attributes of communicators to differences in the messages they produce” (Chance, 1992). The differences in messages produced by writers in gifted education and those produced by writers in middle school education provided the initial impetus upon which the questions for this study evolved.

The review of literature was used to identify compatible components between middle school and gifted education, which were then used as the basis for the comparison

of the program delivery models. Models designed specifically for gifted education, as well as middle school education models, and school policies and practices were identified through a survey of the components identified. The technique of content analysis was utilized to provide a framework for the design of the study.

Question 4: What components of middle school education and gifted education are present in the middle schools of a large Central Florida public school district?

During the study, the large Central Florida public school district studied had an enrollment of 65,044 students. The students in Grades 6-8 that are served in 11 middle schools with an ongoing gifted program were utilized as a research base. The student population was 68% White; 14.7% Black; 12.4% Hispanic; 3.1%, Multi-racial; and 4.2% classified as Other. The district employed 4,586 teachers.

The process of identifying intellectually gifted students within the district includes several stages. The first stage is the referral stage in which a referral may be originated by school personnel, parents, or students. The referral source may contact the school's guidance counselor to initiate the referral. The school will then seek to obtain parental permission to continue the screening process. The teachers and parents of the nominated student will then complete a checklist of the student's characteristics. A short-form intelligence test or screening is then administered. The information obtained from these documents is then presented to the school-based student study team for review and recommendations. If the student study team recommends further testing, then a certified school psychologist will conduct an individual intelligence evaluation. The student study team will then reconvene to review all testing and declare the student eligible or ineligible for the gifted education program. According to the school district's manual for Exceptional Student Support Services, eligibility includes, but is not limited to: a superior

intellectual development as measured by an intelligence quotient of 2 standard deviations or more above the mean on an individually administered standardized test of intelligence.

The specific focus of this question was on the large public school district studied. The district delivers middle school gifted education by utilizing a variety of methods. A case study approach was employed to determine the practices actually being utilized in 11 middle schools within the district. Each school principal or designee was asked to answer questions containing the components that are common to both middle school education and gifted education. In a case study approach, information obtained from school principals was compared with information observed by the researcher in campus visits. Marshall and Rossman (1989) suggest that this approach entails “immersion in the everyday life of the setting chosen for the study; the researcher enters the informant’s world and through interaction seeks the informants’ perspectives and meanings” (p. 17). A case study concentrates on the way a particular group of people confronts specific problems, situations, or programs. It brings new perceptions and helps the reader understand how and why events happen, or verifies what is already known (Fraenkel & Wallen, 1996). Shaw (1998) explained that “case studies are problem centered, small scale, entrepreneurial endeavors which are often used when understanding is needed in order to improve practice” (p. 29). Observation is a crucial part of the data collection process in qualitative research (Merriam, 1998). Observations of the 11 middle schools utilized in this study yielded insights into the relevant activity, behavior, and environmental conditions that were better noted when observed first-hand.

The participants for this portion of the study were representative of each of the 11 middle schools in the public school district studied. Random selection or sampling was unnecessary, because a principal or designee from every school in the study was used.

The population of this study included all district middle schools during the 2004-2005 school year. An interview was conducted with each school principal regarding their middle school gifted education program. The interview was oriented toward the components that have been identified as common to both middle school education and gifted education by the literature. An observation was then conducted for each school to allow the researcher to observe the presence and degree to which each identified component existed. Qualitative research methods allowed the researcher an opportunity for exploration of the commonly identified components that are evidenced by both middle school and gifted education literature and then to further explore these components as they occur in practice. This case study was an inductive investigation in which emergent information gathered during fieldwork may reformulate the original questions (Bogdan & Biklen, 1992). A thorough, richly detailed description of school culture emerged as the researcher observed and interviewed participants. Data in this investigation were gathered through observation, interviews, and review of literature. This was a multi-case exploratory case study because it used multiple middle schools and sought to uncover the existence or non-existence of commonly identified components of a middle school gifted education program (Yin, 1994).

Prior to fieldwork, permission to conduct the research was obtained from the local school districts and from the University of Florida Institutional Review Board.

Question 5: What components of middle school education and gifted education most frequently occur in conjunction with one another?

Through the use of interviews and campus observations, the school practices were analyzed to determine if any common pairings of components were being utilized. The researcher wished to determine if there were other groups of components that middle

school gifted education programs tend to commonly combine and to determine if there was a consistent rationale for doing so.

Summary

This study took a comprehensive look at literature, current school practices, and recommended models of both gifted education and middle school education. The information gathered was compared to give an overall sense of what components of middle school and gifted education appear to work in congruence with one another. In Chapter IV, the results and conclusions of the data gathered are discussed.

CHAPTER 4

RESULTS

This study addressed the problem of identifying components of both middle school education and gifted education that are compatible across both sets of models. The specific focus of this study was on program delivery models. Delivery systems incorporated components that were related to scheduling and organization of both academic and co-curricular activities as well as other student support services (Chance, 1992). A component was identified as part of the delivery system if it referred to organization, scheduling, or structure of the total school environment or if it referred to student support services, total school programming, or staffing decisions.

Statement of the Problem

This study was designed to investigate the presence of consensus-based components for gifted education within a middle school setting. Specifically, the study addressed the following questions:

1. What are the major components identified by existing middle school models?
2. What are the major components identified by existing gifted education delivery models?
3. What categories are compatible themes across both gifted education and middle school education delivery models?
4. What components of middle school education and gifted education are present in the large public school district studied ?
5. What components of middle school education and gifted education occur most frequently in conjunction with one another?

Literature Results

The content analysis portion of this study was developed from six gifted education models and seven middle school education models. The content analysis was utilized to identify compatible components of middle school education models, gifted education models, and both gifted education and middle school education. The categorization used for identifying the components was the program delivery model. Components from each model were studied and all program delivery model elements were extracted from the model. From each model, a component list was developed consisting of all program delivery model components from each middle school model and from each gifted education model. Two levels of comparison were made for the content analysis. First, common components of middle school education were identified along with common components of gifted education. Second, common components of both middle school and gifted education were identified.

Several gifted education models were utilized for content analysis. The models were chosen from surveys and overviews of multiple models of gifted education. The gifted education models included in the study are listed below:

- Clark, B. (1992). *Growing up gifted*. Columbus, OH: Charles E. Merrill.
- Gallagher, J. J. (1985). *Teaching the gifted child*. Boston: Allyn & Bacon.
- Kaplan, S. N. (1974). *Providing programs for the gifted and talented: A handbook*. Ventura, CA: Office of the Ventura County Superintendent of Schools.
- Renzulli, J. S., & Reis, S. M. (1985). *The schoolwide enrichment model: A comprehensive plan for educational excellence*. Mansfield Center, CT: Creative Learning Press.
- Taylor, C. W. (1978). How many types of giftedness can your school tolerate? *The Journal of Creative Behavior*, 12(1), 39-51.

Taylor, C. W., Lloyd, B., & Rollins, J. (1971). Developing multiple talents in classrooms through the implementation of research. *Journal of Research and Development in Education*, 4(3), 42-50.

Treffinger, D. J. (1986). *Blending gifted education with the total school program*. East Aurora, NY: D.O.K. Publishers.

Each gifted education model was reviewed to identify components of the program delivery method of each model. The category of delivery system included components that were related to scheduling and organization of both academic and cocurricular activities as well as other student support services. A component was defined as a single assertion about some subject that can be classified under a category (Chance, 1992). A component was identified by the researcher when assertions were made by the author in terms of recommendations, suggestions, or essential components.

A component was placed under the category of program delivery system if it referred to the organization, scheduling, or structure of the total school environment. Program delivery components also addressed particular student support programs or referred to the organization of content, staff, or students within the context of the total school curriculum. Also identified were program delivery components referring to the selection of staff or students that related to total school programming (Chance, 1992).

Clark's Model

Table 4-1 presents components identified in Clark's (1992) model for gifted education. Clark (1992) proposed a gifted education delivery model that included components ranging from enrichment within the regular classroom to special education classes and schools. Clark proposed multiple acceleration options with an open-education concept that included non-graded, multi-age classrooms with flexibility for

regrouping. Clark proposed an individualized approach to meeting the needs of each gifted student.

Table 4-1. Clark's Model for Gifted Education

Delivery System
Within heterogeneous classroom (1)
Open-education model with cross-age grouping (2)
Coordinator for gifted programs (3)
Individual learning outside regular classroom (4)
Flexible grouping and scheduling (5)
Access to intellectual peers (6)
Learning centers (7)
Advanced placement (8)
Mentorships (9)
Individual pacing (10)
Use of community to access data (11)
Community service (12)
Student government (13)
Cooperative student/teacher/parent planning (14)
Use of adult experts in areas of student interest (15)
Identify and serve students who have high levels of intellectual ability or promise of such development, multiple criteria for selection (16)

Gallagher's Model

Table 4-2 presents components identified in Gallagher's (1985) model for gifted education. Gallagher (1985) focused a great deal on making accommodations for gifted students. In the area of learning environment modifications he recommended a wide range of individualized options for students. His recommendations ranged from enrichment in the regular classroom to specialized classes and activities for gifted students. Flexible scheduling and grouping are important aspects of this model.

Table 4-2. Gallagher's Model for Gifted Education

Delivery System

Modified learning environment, enrichment in regular classroom, consultant teacher, independent study or resource room (1)

Changed learning environment, students select interest activities, magnet schools (2)

Individual assignments or projects (3)

Flexible scheduling (4)

Counseling and programs for gifted underachiever (5)

Classroom modifications and accommodations for gifted underachiever (6)

Counseling and programs for culturally diverse gifted students to develop talents (7)

Individualized Education Plans for gifted students with disabilities (8)

Identify students with special abilities for applying abstract concepts, multiple criteria (9)

Kaplan's Model

Table 4-3 presents components identified in Kaplan's (1974) model for gifted education.

Table 4-3. Kaplan's Model for Gifted Education

Delivery System

Homogeneous environment for gifted students for various times/activities (1)

Heterogeneous environment for gifted students for various times/activities (2)

Enrichment within the regular classroom (3)

Enrichment outside regular classroom in within class groupings (4)

Learning experiences based on ability rather than age or grade (5)

Various grouping practices to include seminars, team teaching, resource room, special interest clubs (6)

Acceleration opportunities, early entry, self-pacing, multi-age grouping, independent study (7)

Guidance services, individual conferencing, group meetings (8)

Identification and interventions for underachieving gifted students (9)

Identification and interventions for culturally diverse gifted students (10)

Apprenticeships/ mentors (11)

Leadership development (12)

Identification and development of creativity (13)

Flexible programming (14)

Differentiated curriculum within regular classroom (15)

Independent study/ contracts (16)

Learning centers (17)

Professional mentors (18)

Independent learning (19)

Kaplan's (1974) model for gifted education program delivery relies heavily on grouping practices and enrichment. Kaplan also proposes various methods of acceleration and program delivery that focus on ability rather than a student's age or grade. Kaplan contends that homogeneous grouping of gifted students is a necessary part of individual student development.

Renzulli's Model

Table 4-4 presents components identified in Renzulli's (1985) model for gifted education.

Table 4-4. Renzulli's Model for Gifted Education

Delivery System
Serve top 15-20 percent of school population (talent pool) (1)
Enrichment experiences, guest speakers, learning centers (2)
Daily enrichment and learning activities (3)
Resource teacher (1:60 ratio) (4)
Individual Education Plans (5)
Student analysis for interests, strengths and learning styles (6)
Interest development activities (7)
Enrichment planning committee (8)
Faculty involvement in committees and needs assessments (9)
Critical thinking skills and research skills taught in regular classroom setting (10)
Experts/ professional mentors (11)
Individual and small-group investigation of student interests (12)
Student exhibitions (13)
Curriculum compacting/ acceleration (14)

Renzulli's schoolwide enrichment model focuses on the top 15 to 20% of the school population. This top 20% is what he calls the "talent pool." His model calls for enrichment experiences in and out of the regular classroom, outside of the school day, and with professional mentors. The enrichment model would also allow students to work on independent research projects and have a possibility for self-paced acceleration through the curriculum.

Taylor's Model

Table 4-5 presents components identified in Taylor et al.'s (1971) model for gifted education.

Table 4-5. Taylor's Model for Gifted Education

Delivery System
Identify multiple areas of student talent (1)
Extracurricular activities and life learning experiences as part of regular curriculum (2)
Curriculum taught in regular classroom (3)

The Taylor et al. (1971) model focuses primarily on the delivery of gifted education program within the regular classroom with outside enrichment activities. Taylor recommends that extracurricular activities be built into the regular school day as to have maximum impact on the school population.

Treffinger's Model

Table 4-6 presents components identified in Treffinger's (1986) model for gifted education.

Table 4-6. Treffinger's Model for Gifted Education

Delivery System
Use of portfolios for individual development (1)
Serve students with potential for above-average ability (2)
Appropriate student services based on individual needs (3)
Multiple grouping/ learning experiences within one classroom (4)
Independent study (5)
Gifted curriculum provided in regular classroom (6)
Gifted specialist in each school (7)
Individual education planning committee (8)
Faculty involvement in committees and needs assessments (9)
Critical thinking skills and enrichment provided in regular classroom setting (10)
Experts/professional mentors (11)
Individual and small-group investigation of student interests (12)
Student exhibitions (13)
Curriculum compacting/ acceleration (14)
Heterogeneous grouping throughout the day (15)

Table 4-6. Continued

Delivery System
Placement by ability rather than age or grade (16)
Personal and social skill development (17)
Variety of delivery methods for each student (18)

Treffinger's (1986) model focuses a great deal on providing each gifted student with an individualized education approach. The foundation of his model provides gifted education students enriched experiences and curriculum within the regular classroom with accommodations. However, Treffinger did suggest that gifted students be provided with access to their gifted peers for a portion of each day and that activities be structured accordingly. This model proposes that students be placed in classes and programs based on their individual talents rather than chronological age or grade level.

Common Themes in Gifted Education Models

Table 4-7 identifies components found in two or more of the gifted education models, organized by categories of gifted education. These categories were developed and classified by Chance (1992).

Table 4-7. Components Found in Two or More Gifted Education Models

Theme	Components Identified	# of Models
Apprenticeships	7	5
Mentors/outside experts	3	2
Acceleration	5	4
Exploratory/student interest activities	5	4
Independent study	10	5
Learning centers/ Individual pacing	6	4
Special classes outside regular classroom	7	5
Flexible scheduling	5	4
Regrouping	1	1
Enrichment within regular classroom	8	6
Guidance component	2	2

All gifted education models recommended the use of enrichment activities within the regular classroom as part of the program delivery for gifted education. Special classes in a heterogeneous setting were included in five of the six models. Apprenticeships and independent learning activities were also noted in five of the six models. Learning centers, exploratory activities, flexible scheduling, and acceleration were also represented in four of the six models.

Middle School Models

Seven middle school education models were utilized for content analysis. The models were chosen from surveys and overviews of multiple models of middle school education. The models included in the study are listed below.

- Alexander, W., Williams, E., Compton, M., Hines, V., & Prescott, D. (1968). *The emergent middle school*. New York: Holt, Rinehart & Winston.
- Beane, J. (1990). *A middle school curriculum: From rhetoric to reality*. Columbus, OH: National Middle School Association.
- Carnegie Council on Adolescent Development. (1996). *Turning points: Preparing American youth for the 21st century*. New York: Carnegie Corporation.
- George, P., & Alexander, W. (2003). *The exemplary middle school*. Belmont, CA: Thomson Wadsworth.
- Eichorn, D. (1966). *The middle school*. New York: The Center for Applied Research in Education.
- Lounsbury, J. H., & Vars, G. E. (1978). *A curriculum for the middle school years*. New York: Harper & Row.
- National Middle School Association. (2003). *This we believe*. Columbus, OH: Author.

Each middle school education model was reviewed to identify components of the program delivery method of each model. The category of delivery system included components that were related to scheduling and organization of both academic and cocurricular activities as well as other student support services. A component was defined as a single assertion about some subject that can be classified under a category (Chance,

1992). A component was identified by the researcher when assertions were made by the author in terms of recommendations, suggestions, or essential components.

A component was placed under the category of program delivery system if it referred to the organization, scheduling, or structure of the total school environment. Program delivery components also addressed particular student support programs, referred to the organization of content, staff or students within the context of the total school curriculum. Program delivery components referring to the selection of staff or students that related to the total school programming were also identified (Chance, 1992).

Alexander's Model

Table 4-8 presents components identified in Alexander's (1968) model for middle school education.

Table 4-8. Alexander's Model for Middle School Education

Delivery System
Intramural activities part of P.E. (1)
Health services (2)
Laboratory courses (3)
Character education through a counseling teacher (4)
Activity schedule for clubs, games etc. (5)
Gifted curriculum provided in regular classroom (6)
Counseling through a home base teacher (7)
Health education (8)
Shortened exploratory classes (9)
Study skill centers (10)
Team planning (11)
Team teaching (12)
Teacher planning and group conferencing (13)
Flexible scheduling (14)
High school students as tutors/mentors (15)
Independent study (16)
Teachers that are experts in remedial and basic skill development (17)
Teachers that are experts in multiple fields (18)
Non-graded, continuous progress plan (19)

Table 4-8. Continued

Delivery System

3 systems in congruence: personal development, skills for continued learning, and organized knowledge (20)

Relationship with one teacher for personal/ educational guidance (21)

Individualization (22)

Alexander et al. (1968) makes a variety of recommendations regarding a middle school education delivery model. The model focuses a great deal on scheduling and providing student guidance services. Alexander's model proposes that every student meet with a home base teacher each day or each week to develop a continuous relationship for the child to seek social and emotional support through their academic endeavors. This model also proposes the use of flexible scheduling in order to provide time during the school day for student interest activities, student clubs, or intramurals. Alexander also proposes the use of exploratory courses with shortened curricula in order to allow students to explore their interests.

Beane's Model

Table 4-9 presents components identified in Beane's (1990) model for middle school education.

Table 4-9. Beane's Model for Middle School Education Delivery System

Thematic units (1)

Team structure (2)

Large group instruction with teams (3)

Small group instruction within team (4)

Flexible scheduling (5)

Individual activities (6)

Collaborative planning (7)

Intramural and club activities (8)

Heterogeneous grouping (9)

Beane's (1990) primary focus is on providing a team structure and team teaching with the middle school students. Beane emphasizes the importance of flexible scheduling in providing true team teaching. This model advocates the use of heterogeneous grouping, without special classes for gifted or learning disabled students. Beane also encourages the use of intramural and club activities as part of each student's regular school day.

Carnegie Council on Adolescent Development Model

Table 4-10 presents components identified in the Carnegie Council on Adolescent Development (1996) model for middle school education.

Table 4-10. Carnegie Council on Adolescent Development's Model for Middle School Education

<u>Delivery System</u>
Supervised community service (1)
Team structure (2)
Exploratory classes (3)
Specially trained teachers (4)
Supportive grouping (5)
Health and fitness focus (6)
Heterogeneous grouping (7)
Family and community partnerships (8)

The Carnegie Council on Adolescent Development (1996) model focuses on adolescent development through increased partnerships with their family and community. They advocate a community learning approach through supervised community service projects and increased parental interaction and decision making. They encourage special training of teachers and staff to work with adolescents and their needs and to allow special exploration time for adolescents to discover themselves, their interests, and their talents.

Eichorn's Model

Table 4-11 presents components identified in Eichorn's (1966) model for middle school education.

Eichorn's (1966) model also proposes a team approach. This approach utilizes team teaching and flexible scheduling with regrouping. Eichorn's model allows for acceleration through middle school from 2 to 4 years. Individual progress and development are emphasized in this plan, along with interest activities and intramurals. These interest activities would be scheduled as part of the regular school day.

Table 4-11. Eichorn's Model for Middle School Education

Delivery System

- Interrelated units within curriculum (1)
 - Intramural athletic program (2)
 - Close relationship between students and staff (3)
 - Student association (4)
 - Equal ratio of male/female instructional staff (5)
 - Team planning (6)
 - Individual PE facilities (7)
 - Grouping-based ability rather than age or grade (8)
 - Resource centers/individual study (9)
 - Grouping based on physical and emotional growth for physical activities (10)
 - Students involved in decision making (11)
 - Team teaching (12)
 - Teacher planning and group conferencing (13)
 - Flexible scheduling (14)
 - Instructional personnel take on guidance role (15)
 - Acceleration (16)
 - Large group social activities (17)
 - Interest activities as part of school day (18)
 - Counselors to be utilized for extreme cases (19)
-

George & Alexander's Model

Table 4-12 presents components identified in George and Alexander's (2003) model for middle school education. George and Alexander's (2003) model focuses on

adolescent development and exploration. They advocate a team learning approach with flexible scheduling and supportive grouping to focus on students's academic as well as emotional needs. The advisor set-up proposed by George and Alexander gives middle school students that extra support they need to transition to the middle school years. Exploratory classes along with interest activities and clubs allow students an opportunity to explore their own talents and interests while discovering their own social and emotional skills.

Table 4-12. George and Alexander's Model for Middle School Education

Delivery System

- Advisors (1)
- Team structure (2)
- Exploratory classes (3)
- Flexible scheduling (4)
- Specially trained teachers (5)
- Supportive grouping (6)
- Small school setting (7)
- Intramural and club activities (8)
- Shared decision making (9)

Lounsbury and Var's Model

Table 4-13 presents components identified in Lounsbury and Var's (1978) model for middle school education.

Table 4-13. Lounsbury and Var's Model for Middle School Education

Delivery System

- Students progress through the curriculum at their own rate (1)
- Thematic, interdisciplinary units (2)
- Faculty mentors as counselors/mentors (3)
- Block scheduling (4)
- Group by age or grade (5)
- Multiple groups working on different curricula (6)
- Multiple sequence, variable rate, and continuous progress scheduling (7)
- Cross-age grouping (8)
- P.E. each day (9)

Table 4-13. Continued

Delivery System

Intramurals (10)

Teachers as counselors/mentors (11)

Student interest activities (12)

Interest activities part of school day (13)

Flexible scheduling (14)

Health education (15)

The Lounsbury and Vars (1978) delivery model of middle school education focuses around flexible scheduling and block scheduling. This scheduling allows for student interest activities to be scheduled during the school day, as well as provide for regrouping of students by age or grade level. Lounsbury and Vars also propose multiple methods of curricula tracking and sequencing. They recommend that each student has access to a faculty mentor.

National Middle School Association Model

Table 4-14 presents components identified in the National Middle School Association (2003) model for middle school education.

Table 4-14. National Middle School Association's Model for Middle School Education Delivery System

Advisors (1)

Team structure (2)

Exploratory classes (3)

Flexible scheduling (4)

Specially trained teachers (5)

Social skill development (6)

Collaborative planning (7)

Family and community partnerships (8)

Health, wellness, and safety focus (9)

The National Middle School's (2003) model focuses on creating a small school atmosphere or possibly a school within a school set-up. They advocate a team learning

approach with flexible scheduling and supportive grouping of students to meet their social and emotional needs. The National Middle School Association also focus on training teachers to work specifically with adolescent students and to provide a wealth of exploratory learning opportunities to assist the students in engaging and developing their individual talents.

Common Themes of Middle School Education

Table 4-15 identifies components found in four or more middle school education models, organized by categories of middle school education developed by Chance (1992).

Table 4-15. Components Found in Four or More Middle School Education

Theme	Component Identified	# of Models
Thematic, Interdisciplinary units	4	4
Guidance through teachers	5	3
Intramural activities	4	4
Student Interest activities	4	4
Team Teaching	7	7
Team Planning	4	4
Independent study/study skill centers	5	3
Flexible Scheduling	4	4
Regrouping	3	2
Continuous progress/non-graded	4	4
Guidance Component	1	4
Specially trained teachers	1	3

The middle school models had many common components in relation to the delivery system. Team teaching appeared in all seven models, and team planning or conferencing appeared in over half the models. Four out of seven models recommended thematic units and interdisciplinary instruction. Continuous progress or non-graded approaches that included alternate pacing or acceleration appeared in four of the seven

models. A guidance component made up of teachers was also evident in a majority of the models.

Common Themes in Gifted Education and Middle School Education Models

Table 4-16 identifies components found in two or more gifted education models as well as two or more middle school education models in the area of program delivery organized by themes of gifted and middle school education as developed by Chance (1992).

The gifted education models had many components in common with the middle school education models. Independent study and exploratory or student interest activities were among the top components that were recognized across both disciplines. Flexible scheduling and enrichment activities were also consistently included as components of both middle school and gifted education models. The use of some form of acceleration was noted by over half of the models studied and was described in eight different component sections. Providing a guidance component was emphasized as an important element to both middle school and gifted education models as well.

Table 4-16. Components of Gifted Education and Middle School Education

Theme	Component Identified	# of Models
Acceleration	8	6
Exploratory/Student interest activities	8	8
Independent Study	14	8
Learning centers/ Individual pacing	6	4
Flexible Scheduling	8	8
Regrouping	5	4
Enrichment within regular classroom	8	6
Guidance component	7	5

Components in Gifted Education and Middle School Education Models

Table 4-17 lists all components that were identified in a middle school education model and/or a gifted education model. To be included on this list, the component had to be identified in a middle school model, a gifted education model, or both.

Table 4-17. All Components Identified in Middle School and/or Gifted Education Models

Theme	Component Identified	# of Models
Apprenticeships	7	5
Mentors/outside experts	3	2
Acceleration	5	4
Exploratory/Student interest activities	5	4
Independent Study	10	5
Learning centers/Individual pacing	6	4
Special classes outside regular classroom	7	5
Flexible scheduling	5	4
Regrouping	1	1
Enrichment within regular classroom	8	6
Guidance component	2	2
Thematic, Interdisciplinary units	3	3
Guidance through teachers	5	3
Intramural activities	4	4
Student Interest activities	4	4
Team teaching	4	5
Team planning	2	2
Independent study/study skill centers	5	3
Flexible scheduling	4	4
Regrouping	3	2
Continuous progress/non-graded	4	3
Guidance component	1	1
Acceleration	8	6
Exploratory/Student interest activities	8	8
Independent study	14	8
Learning centers/ Individual pacing	6	4
Flexible scheduling	8	8
Regrouping	5	4
Enrichment within regular classroom	8	6
Guidance component	7	5

Middle Schools in a Large Public School District

A case study approach examined the 11 middle schools within a large Central Florida public school system. Interviews were conducted at each school with the school principal or designee. Interview questions (Appendix A) were derived from the common components of middle school gifted education that were identified through content analysis of the literature. Following each interview, the researcher conducted campus observation of gifted classrooms and gifted teacher interaction to determine the extent to which these components were present in the schools.

Common Components in Gifted Education and Middle School Education Models

Table 4-18 lists components as identified by the 11 middle school principals who were studied in the school district. These components were identified by the principals or a designee during an interview and through campus observations by the researcher, including items from all the commonly identified components of the models studied. This information was obtained from either the school interview, observations, or both.

Table 4-18 indicates the number of schools reporting components. The extent (0-3) is defined for each component in Table 4-19.

Theme	0	1	2	3
Acceleration	3	7	1	0
Exploratory classes	0	0	0	11
Student interest activities	4	7	0	0
Independent study	1	10	0	0
Learning centers/ Individual pacing	2	8	1	0
Flexible scheduling	8	2	0	1
Regrouping	9	2	0	0
Enrichment within regular classroom	0	0	0	11
Guidance component	0	11	0	0

The following is a chart to demonstrate the meaning of each Likert value for the components that were part of the interview questions (Appendix A) and observations. The definitions of these components were provided for all participants (Appendix B).

Table 4-19. Interview Question Components with Likert Scale Values

Acceleration
0- Never
1- Students may progress through individual teacher work at desired pace
2- Students advance through courses at their own rate
3- Students can earn credits and advance through yearly curriculum at their own pace
Exploratory Classes
0- Never
1- Occasionally throughout school year
2- Students participate in exploratory classes weekly or quarterly
3- Daily exploratory classes
Student Interest Activities
0- Never
1- Occasionally throughout school year
2- Students participate in weekly or quarterly interest activities
3- Daily interest activities
Independent Study
0- Never
1- Individual teachers assign independent study assignments sparingly throughout the year
2- Weekly or monthly portfolio or individual assessment projects
3- Each student completes a contract of independent study/research for school curriculum
Learning Centers
0- Never
1- Individual teachers use learning centers sparingly in their classrooms during the year
2- Each team creates interdisciplinary activities that are rotated by subject area
3- Students participate in small group instruction daily with enrichment activities and practice
Flexible Scheduling
0- Never
1- Have an occasional activity day or special project that allow teachers to change the schedule
2- Allow teachers to adjust schedule at least once a week
3- Allow teachers full authority over creating and implementing their team schedule

Table 4-19. Continued

Regrouping
0- Never
1- During special activities only
2- During a weekly or monthly block schedule
3- Teachers have full autonomy to regroup students daily as needed

Enrichment within regular classroom
0- Never
1- Instruction within the regular classroom at various times throughout the year
2- Instruction within regular classroom weekly
3- Instruction within regular classroom daily

Guidance Component
0- Never
1- Each student is assigned a guidance counselor
2- Each student is assigned to a teacher they see each week to discuss progress, issue, etc.
3- Each student is assigned to a teacher they see each day to discuss progress, issues, etc.

School Interview Results

To accomplish this case study, interviews were conducted with principals or their designees regarding the identified components that the research indicated to be a part of middle school and gifted education delivery models. Interviews are used two ways in case study research. "It may be the main strategy for collecting data, and it may be used to provide understanding of observations and document analysis" (Bogdan & Biklen, 1992, p. 83). For the purpose of this study, the interviews were used to help the researcher gain insight and understanding of current practices and research observations.

In addition to the 11 participants formally interviewed for this study, informal interviews were often initiated with teachers and counselors as part of the campus observations. These participants were considered elite interviewees, who were defined by Marshall and Rossman (1989) to be "the influential, the prominent, and the well-informed people in an organization, which were selected for interviews on the basis of their expertise in areas relevant to the research" (p. 94). The participants were considered

to be the prominent persons in charge of the gifted program within their middle schools. A structured interview format asked the participants to specifically rate the extent to which each component was utilized on their campus. Open-ended follow-up questions allowed the participant to respond to the situation as it emerged and to provide the participant's ideas and background information on the topic.

Interviews were conducted in private offices or private areas on the campus. Audiotape recordings were made only after obtaining permission from the participants. Each participant was provided a copy of the interview guide and a glossary of terms prior to the interview in order to assist them in answering the questions. The interview tapes were transcribed after the interviews for accuracy.

To allow for confidentiality, each of the 11 middle schools was assigned a code. The responses and results from each school, along with a summary of each, are listed below. Middle School A is indicated below by using the abbreviation MSA, Middle school B, by MSB, etc.

Acceleration

The participants were questioned about the existence of acceleration for gifted students on their campus defined as: students advance through a set curriculum or grade at their own pace and can move through at their own pace regardless of the pace of the students in their class or team. The majority of the schools, 7 out of 11, stated that the students may progress through an individual teacher's work at their desired pace. Many participants commented on the extent to which teachers may allow such acceleration.

MSB--It is much directed by the teacher.

MSC--as far as an individual, it is not an independent curriculum. Um, if a child in a gifted class has the same curriculum that needs to be covered as the child in a regular language arts class. Remember the state does not

specify a different curriculum for middle school. There are strategies. It's the way it is taught.

MSD--I believe that ability was given in a math setting. I had got some parent input back that they were not, that the students weren't working at ability level, meaning that they couldn't go on and they were being I guess you want to say held back a little, I guess restrained. They weren't progressing because others weren't at the same ability level, so I did see that as a conflict in that. As far as the reading, I'm not sure if they let them do that because most of them are working at about the same level in reading. It would be more of a science or geography where I could see that they could go on. Again, I could see it depending on the grade level because I have two teachers at seventh and eighth grade but only one teaching in sixth. So she has the capability of like maybe setting up like you said to where she could pair up students that could progress on their own, whereas the seventh and eighth grade because they go back and forth one might be strong in one subject and vice versa.

MSF--as far as them pacing themselves and like ending the course early or anything, I think that they try to broaden but not advance beyond that course. You know they pace the kids so that they expand out but not ahead.

MSH--If they do active classroom, yes.

Some schools (3 out of 11) stated that they never utilize any type of acceleration.

MSE--Not that I know of, I don't know, I'm trying to think of a class, not that I know of. The only thing, and the reason that I'm not quite sure is that they have new reading programs, century programs and that might be something you know where they might be able to pace themselves.

One school indicated that some students may advance through courses at their own rate.

MSA--On an individual-needs basis, we can create a special schedule for some students and use different books etc.

Exploratory Classes

Participants were asked about whether or not their school offered exploratory type classes or curriculum. All 11 schools indicated that they had exploratory classes.

MSB--All our students go to their elective or exploratory class by grade level.

MSD—They all go to elective classes with their General Ed. peers.

Student Interest Activities

Participants were asked to discuss the extent to which their schools had student interest activities. Student interest activities were defined as: events designed around student participation and interests that develop social, emotional, academic, and physical skills. The majority of schools (7 out of 11) stated that their schools had interest activities occasionally throughout the school year.

MSA-- Um, the teams do take field studies, this morning one of our teams had a breakfast for their kids as a reward for good behavior. They decided that 2nd period was good that day and they had sausage pancakes and grits for breakfast, and they just loved it. Is that the kind of thing that you were looking for?

MSE-- Um, there are special events, um, for everybody, but nothing pulled out separate just for gifted kids.

MSH-- This year we had Aviation Day where Spruce Creek Fly-in flew over because we have a partnership with them, and within the aviation there were activities. But we have not had a day where there were all different interests in the same day.

Some schools (4 out of 11) indicated that they do not do any type of student interest activities throughout the school year.

MSD-- Right, so we've lost all that and it's so it does make it more difficult. You're right, it was a lot easier to do back then. Uh, we are trying we have the Beta Club and things like that for the students to work with. Uh, I just met with some of the parents, and they were questioning the criteria for the Beta Club because it requires straight As and their gifted students are making Bs and so therefore they don't qualify and so we are looking at some of those activities, the same with the Honor Roll.

MSF—No, we don't do anything during the school day. But we do have a huge number of um, extra um, activities after school clubs. We have lots of different clubs that are available to all the kids. But no, nothing that takes the place of their typical school day.

Independent Study

The participants were asked about the extent to which their schools utilize independent study. Independent learning was defined as: students are given the opportunity to choose the curriculum and are given time to conduct research and develop an understanding of the concept using real-world activities and under their own direction. Almost all participants (10 out of 11) indicated that individual teachers assign independent study sparingly throughout the school year.

MSB-- I don't know that we are that free and open yet. I would hope that we would be able to. I know that the teachers do when they are giving a general assignment, um, they give many different ways to portray their results, so if they want to do a monologue, or if they want to do a diagram or, um, a map or whatever, they can pretty much present their results any way they want to. And if they come up with something the teachers hasn't come up with, they usually clear it with them, and it's fine. So they do have a lot of different options there, and some of them are extremely creative.

MSC-- Because there is a curriculum that has to be covered, so I would think that probably not a lot of stuff like that.

MSF-- They do incorporate a lot of projects, and I do think there is a lot of openness to those projects, um, that's just part of teaching gifted kids. You let them branch out you know in their own direction. I think all the gifted teachers try to incorporate projects like that, yeah. Uh, you know the teachers are pretty tied to the standards within those standards. Yeah, there is student choice as far as what they do with that content.

MSG-- Um, only as an enrichment activity. It's not really a part of their curriculum.

MSJ-- Uh, yes, individual teachers assign independent study assignments, but sparingly throughout the year.

MSK-- That's really limited. Maybe in social studies some. Probably language arts, when you are able to pick the subjects, but that is not anything specific for gifted.

One school indicated that their school never utilizes independent study.

MSA—We don't use independent study, no, not to my knowledge.

Learning Centers

The participants were asked to identify whether or not their gifted teachers utilize learning centers. Learning centers were defined as: a location within a school where structured mentoring occurs and assistance is offered through tutors, workshops, computer programs, or audiovisual equipment in reading, writing, math, and as skills such as taking notes, managing time, or taking tests. A majority of the participants (8 out of 11) indicated that individual teachers use learning centers sparingly in their classrooms during the year.

MSB-- In our one, one of our gifted teachers who teaches the math and the science, she does centers, in her classroom. The other two, I've not seen them do learning centers.

MSD—Right, uh, for me as an administrator, that's not a requirement, that's more of a classroom teacher making the decision. They might be presenting a project where they could divide up and each do certain aspects of it to all come together for their conclusions. Um, no, it's not part of the curriculum in the aspect that I'm saying where the teacher has stated that this is going to happen. But she might find that if she has groups that work well together and or its student interest she can divide them up that way. But, that would be a teacher decision totally.

MSH-- I think some of them do, yes. I don't think it's across the board, but I think some of them do.

MSI-- Um, some teachers have 'em, yeah. You know, again, depending on what the subject is, what time of year it is.

MSJ-- Usually technology-related. Like computer lab-type stuff.

Two schools indicated that they never use learning centers.

MSG-- Not really, not any more than they would in the gen. ed. population.

MSF-- Uh, not a lot of learning centers, but as in, I know with the sixth graders, it was next to impossible with her roaming all the time, um, in I can't say none at all, I personally you know observed that, but that doesn't mean it's not going on, I

personally am not in their classrooms all the time. I'd have to check with the teachers to find out, but I have not seen them up and running.

One school indicated that each team creates interdisciplinary activities that are rotated by subject area.

MSE-- Yes, we, uh, started them this year. We call them 'stations' instead of learning centers. They said learning centers was more elementary, so we call them stations. There is also a science class, they have their own little stations set up.

Flexible Scheduling

The participants were asked to identify the extent to which flexible scheduling exists in their schools. Flexible scheduling was defined as: school schedules in which classes are taught for different lengths of time on various days...classes also vary in size, with larger classes meeting for longer periods of time, meeting more than the traditional 50 minutes for each period. A majority of the schools (8 of 11) indicated that they never used flexible scheduling.

MSD--No, um, in fact it is more of a crunch they're feeling, the teacher of the gifted, to make sure they have certain locations, so we are limited in that area so we, uh, depending on the amount of students enrolled whether it warrants a full class, right now we are basically self-contained for the sixth grade.

MSG-- My gifted program is not afforded, up until this year they could, but not any more.

MSI-- Um, again, not since we've gone to 6 periods. That was always the case before because they all went out to PE sixth and seventh period, so any time first through fifth the team could do anything, block their day any way they wanted.

MSJ-- For the last few years, no. The school has had a schedule change, so no. It's pretty much a set schedule.

MSK--No, stick to the master schedule. Now we have been able to do that before under some circumstances. This year we haven't been able to do that because of the dual rosters. We are going back next year to the way it used to be. Actually, that's one of the things that we need to be talking about--that special activities are limited. We used to take the children up to University of Florida, for a special program up there, we used to do a lot and we went down to a school in [city].

MSE-- Uh, [laughing], they stick to the master schedule. How would you do that?

Two participants indicated that they have an occasional activity day or special project that allows the teachers to change the schedule.

MSF-- Um, we try to do that especially if they are doing a field trip, you know we share kids or we can tweak and make some changes. Um, that sixth grade class next year is going to have a lot of flexibility because she's gonna have those kids you know, um, all day long. She's not really gonna need to adhere to the periods, like you know, everybody else does. Seventh and eighth grade, it's a little bit difficult because we do have high-achieving kids in some of those classes with, um, it doesn't just impact our gifted kids. But, um, if there is a way it can be done, I try to do it. I try to help the teachers in any way. We try to make it work.

MSB-- They are able to do so. They work in conjunction to do so and sort of make out a plan and sort of say, okay, can you take this particular grade tomorrow or keep this group so I can have that group. They've done expeditions in digging, archaeological digs, so they've...it's not to a great extent that they do that, but they have done it. They actually have a sister school, [MS D] is their sister school, and they go over and dig up things in their school area, in the ground, that have been placed there by their students, and vice versa. So we work together with another school.

One school indicated that they give teachers full authority over creating and implementing their team schedule.

MSC-- Yes, they can do that. Yes, and that is an advantage for them again, because [of] their classes. Some schools used to do what is called a double roster and,...Well, now let me back up on that. Now, they can do that for language arts, and for social studies, and they can do that for the science. The reading might have a problem because of the Spanish. Because the Spanish is not necessarily a gifted class, you have children who are in the Spanish class, and then you also have gifted children in the Spanish class because they are getting the high school credit. It is not allocated for high school courses. So you couldn't necessarily block something that would affect all of the Spanish classes.

Regrouping

Each participant was asked to comment on the extent to which their school utilizes regrouping. Regrouping was defined as: reorganizing class or team assignments to allow for students and teachers to meet with different groups according to curriculum or interest

needs. A majority of the schools (9 out of 11) indicated that they never utilize regrouping at their schools.

MSB-- We haven't done that. Our population of gifted has been relatively small, um, and which ends up in, which results in having one period of seventh grade science gifted, so there is really no way to level them with another group. Now, they work in conjunction with regular ed. We do have one gifted science class that works with the advanced science eighth grade. So they work together, but it is more like a co-teach situation, not so much of a leveling.

MSC-- Um, when you say do they have the ability to regroup. I don't know that you can necessarily do that, because remember that they are taking elective classes as well. Let's say the child is taking band, another concern with that would be that the math classes are leveled here, and um. There is, the science classes are leveled at middle school for either advanced or regular. And the math classes are, as I am sure you can relate with, Seminole county. You've got, um, some children in the gifted program taking algebra II, some taking algebra I, some taking math III advanced. So, I'm not sure they necessarily would do that. If it doesn't have a problem with their schedule the rest of the day, in other classes there isn't a problem with that. There isn't an issue to tell them, No, they can't. Umm, it's all...you just can't pull a child out of a Spanish class or out of an Algebra II class because he's got to do a project for his gifted social studies class.

MSE-- They haven't, well, this is the first year I've been here. I can't speak for more than what's just happened this year, and they haven't done that. Um, that is not to say that wouldn't happen, but they haven't done it.

MSI-- They could, but I don't know of it happening. So, I would probably say it's another "never."

MSK-- This year the answer is "no." Last year you could.

MSE-- Again, that's not likely because they have so many requirements that they have to meet for each class, like for math. Especially with reading now with the new guidelines whether they will be able to go into the Spanish class like for the high school credit and how the core course reading class will be affected.

Two schools indicated that they used regrouping during special activities only.

MSD-- That would be tough to do because we only have one, one gifted sixth grade teacher, so there is nobody to regroup with. Uh, there is no way to, seventh and eighth grade might have a little bit more flexibility in that area--again, teacher's choice and whether they want to or not.

MSI-- Well, they have individual schedules that they can change if they want to within the confines of when they have classes.

Gifted Program Format

Each participant was asked about the format of their gifted program. They were asked to determine the extent to which their program was or was not delivered in the regular classroom with enrichment. All participants indicated that the students receive instruction in the regular classroom daily.

MSA-- We have some teams, we were just discussing this today, as a matter of fact. We have two teams in the sixth grade, but we don't have teams in the seventh or eighth grade. Um, we have double rosters this year, but I think we are going to discontinue them for next year. Where advanced students who are recommended for advanced science can be in the same classes with the gifted. There are two rosters one with the gifted students and one with the advanced. There may be some advanced in there, but it's going to be a majority gifted.

MSB-- Homogeneous gifted classes. Um, as they move on, in sixth and seventh grade, it's gifted teachers/gifted students, that's their class. One teacher per subject, this year we are going to four teachers so we will have, um, the Language arts teacher will teach some reading. But we will have a different teacher for each subject area because we, um, have to now go by what the teacher is certified in. And in the past if you were certified in gifted you could teach all of the core subjects in gifted. But now if you're certified gifted and language arts, you're teaching language arts, you're not teaching anything else. Um, I don't know where I was going with that. There hasn't been much opportunity to do any leveling there at all. Predominantly, now the kids in eighth grade, in seventh and eighth grade, the kids can take a high school math class, Algebra I and Algebra II. So if our seventh graders are able to take algebra I they are out there with the regular population for that and then algebra II as well. The eighth graders this year have been in advanced science, lab course, so they have been in there with a regular ed. grouping.

MSC-- The enrichment would be in their academic classes which would be identified as them receiving gifted service. All right, the way the program is set up here is that we have five teachers that focus on the five academic areas. You have Reading, language arts, math, science, and social studies. And we have, as far as our staffing allocation for this school, and it is based on numbers, of course, five teaching units assigned to Deland middle for the gifted program. So the five academic teachers, each teach two periods of each grade level. Two sixth grade, two seventh grade, two eighth grade. Uh, While the team concept is not necessarily schoolwide, but while in the gifted program we'd like to think it is. While these teachers are going to roll with these teachers. If you have the language arts teacher, you are going to have them sixth, seventh and eighth grades. Uh, huh, obviously one of the advantages of that is that the teacher knows what you had in seventh grade because she had them the year before. Umm, there

isn't a common plan for the teachers, but they do get together for what they call a professional planning time. With [the district], teachers have a professional planning time 30 minutes before the bell each day, and um, they work schedules out that they will meet during this time. Sometimes they may meet in the afternoons. They schedule the yearly reviews and do them together as a team, as far as the EPs for the children. The paperwork, and, uh, they have the parents come in of course to sign them in either a classroom or the media center, and they all try to be there at that same time, during the particular evening or afternoon to answer any questions.

In [the district], uh, a lot of the students who are receiving services for the gifted program choose to take an academic Spanish class in eighth grade instead of reading, because a lot of the children opt for the International Baccalaureate program, and that is one of the requirements to get the 5th year of language. So, [the district] schools allow a child to bank a foreign language credit if they take the class in the eighth grade if they continuously take classes in that same area or that same language in high school.

MSD-- Right now we are basically self-contained for the sixth grade. Yes, one teacher all day. And then in seventh and eighth they flex, but what you have is a teacher will teach two core subjects so they will go to that teacher twice. Right, some of the gifted students, they might have an advanced math class where it not necessarily gifted, so they therefore would be with some gen. ed peers that are higher functioning in math, but yet not in a gifted setting. So, you might [be] gifted for 3 or 4 of their core subjects and 1 or 2 might be with an advanced setting.

MSE-- Well, we have our gifted students. With sixth grade they go with the gifted teachers. They are all certified gifted. They go to science, math, social studies. In seventh and eighth grade there is a mixture, but next year it will be homogeneous gifted kids with the gifted kids.

MSF-- Um, sixth grade, well, sixth grade gifted is changing a little bit from what it was this year. This year, um, there was a teacher of the gifted with my sixth grade gifted students and that teacher roamed from room to room with the sixth graders and, kind of, I wanna say co-taught with the sixth grade teachers. OK, so she was on the move for every period. She wasn't real happy with that. It was just a space issue. We just, we didn't have any more classrooms. So, for next year we've gotten some extra portables, and our sixth grade is going to be self-contained for our gifted. So our sixth graders will be with one teacher all day except for their elective and PE. Um, and then my seventh and eighth graders, um, this year had, um, separate class for reading and language arts. They had advanced math and science, and that had some high-level kids in it that weren't gifted. So not all of their teachers are certified endorsed teachers, so the advanced teachers are not certified yet but they are working toward it. They are coded as like advanced classes. And, um, that pretty much what is going to happen next year, except we are going to that consultation model where, um, that way every single one of their classes will have input from a gifted endorsed teacher,

regardless of like if it's an advanced math or advanced science, it is still going to have that gifted teacher input.

MSG-- I have students that are, um, multi-rostered per teacher.

MSH-- We have, um, well it's different for each grade level, let me just look at the master. Ok, we have, um, our math is, we don't [have] a gifted math per say, our kids are just in advanced math, although it's a course code. Ok, and we have a gifted geography and a gifted reading, and a gifted language arts. And we do not have a gifted science, so they are either in advanced science or regular science, ok. Um, in the... that's pretty much true for sixth and seventh grade. Eighth grade doesn't have gifted reading, if they score above the 84 percentile, they, um, they take Spanish instead of reading.

MSI-- The overall setup this year, it's going to change next year, is that each teacher has one grade level, one subject, and they have maybe all gifted classes or 5 gifted classes and one regular class. They spend five periods a day in gifted classes, with other gifted students, and then their pass time, their elective, their PE, and their lunch is heterogeneous.

MSJ-- It's a combination, ok, our reading language arts social studies and science is self-contained gifted. Our math is giving gifted services in advanced math classes. As is their elective and PE, do you understand what I mean by that? Every day 3 of their 7 are regular classrooms. Now for eighth graders they can opt out of the reading requirement course if they score high enough and take a foreign language, and most of them do this, so in eighth grade you can add one to that.

MSK-- Well, we have all three grade levels, sixth, seventh and eighth. The students are generally in all of their core classes for gifted. They are mixed for elective and PE. You know this year, generally it's been homogeneous, but this year it's been a little more mixed in some of the classes. We are going back to a homogeneous next year. We are dual rostered. We have historically only dual rostered when a kid was in advanced math, and in [the district] that means they are accelerating a year. But those classes, they have been mixed, there would be non-gifted kids in an advanced class. I figure in general that kid has accelerated in math, and is gifted in that area. They just haven't been identified gifted overall in the program. A couple of times we had some students that declined to be in the gifted program that had qualified. The way it works out they have that together. They may all be in the same PE class, just because that's the way the master schedule works out.

Guidance Component

The final component the participants were asked to comment on was the existence of a guidance component. Guidance component was defined as: assigning individual

students to a teacher or guidance counselor to allow for individual daily or weekly monitoring. All participants indicated that the guidance component at their school was present through each student being assigned to a guidance counselor. None of the schools had any form of an advisor/advisee setup.

MSA-- We have a guidance counselor for every grade level and that person is responsible for every student in that grade, regardless of exceptionality.

MSB-- We are starting a mentor program next year, and I'm not quite sure how that's going to work itself out. It will be a mentor program, and I would imagine that if it's a gifted student that needs a mentor, that student will have a mentor, but I don't think it will be across the board.

MSC-- Um, well, we have a guidance counselor at each house level. So we have one for sixth, one for seventh, one for eighth, and actually we have a guidance counselor that oversees the ESE needs. Um, if children receiving gifted services need to see a counselor they would see the eighth grade counselor of seventh grade or sixth grade, depending on the grade of the student. There isn't a separate person for that program.

MSD-- The only other outside they do is they go to a homeroom quarterly when we have our any of our testing information or anything pertinent. They are assigned a homeroom, but they don't go to that daily and it's not considered an advising period of 20 minutes every morning such a thing, and they each have a grade-level guidance counselor.

MSF-- Uh, the gifted, the kids go to their house guidance counselors. They work, you know the whole school is divided, you know, sixth grade house, seventh grade house, eighth grade house, and there is eagle house which is our ESE department. Um, all of my ESE kids come to my ESE house to see my guidance counselor. Gifted kids, since they are in classes with gen ed kids, they go to their grade-level houses to see guidance counselors there. It's on an as-needed basis.

MSG-- They work through basically the, um, the regular ed. Grade-level guidance counselor. Well, I also have a guidance counselor that's assigned to ESE.

MSH-- No, we used to, but now we are pretty much back to a junior high set-up.

MSI-- We used to have advisor/advisee back when middle school really existed. But when our teachers in [the district] had to go to teaching 6 periods a day (they used to have 5 periods a day) a team plan, and a personal plan. When that went away with no increased pay, that advisee group did too. It was really, really another plan if you were going to do it correctly to work with the students, uh.

MSJ-Well, it's odd that you mentioned that. We haven't had an issue in the past with, um, with those students needing additional, you have a few, like we have some kids that are like in the "goth" um, group and, um, they've had some tragedies and issues out there, but you have that across the board. But this year we've noticed that in our sixth grade group the transition from being safe with one teacher in the elementary school is becoming more difficult with the sixth graders coming here. And the gifted kids, they've been so protected their entire lives, and I don't mean to make that sound stereotypical, but usually in elementary school they have their little nest you know, and the same nest for all five or six years, the same little group of kids stay together. They get to the middle school and not only are not all of their classes together, but they also have kids coming from other schools that they haven't met in gifted. So you have that pecking order trying to determine, and this is the first time they have ever really had to deal with it really. Plus you have the whole hormonal issue going on, the whole difference in puberty at this time and you have a sixth grader who looks like he's 8 versus a sixth grader who looks like he's 15.

So, what we've done this year, and I've actually met with a little group of four little boys, and I mean little boys who have just had a hard time with it (and holding up paper) here are my notes. And why they think they have had a hard time, and we've been talking about how we can restructure support for them, um, in the coming years. For example, the things they (the students) mention that are good are the kids are smarter, the pace is faster, the teachers are nice, they are dedicated to their job, it's a great educational environment, the schedule is great some are far too separated, which means the classes, they have to walk a long way, and they are not used to this transition thing, and when they do transition, they feel like they are somewhat thrown to the wolves.

Because they have not developed the social skills to interact with these huge groups of people because they haven't, because they have been so isolated. Okay, (reading from list) the things that are bad are some classes are less structured and they get wild. Because for them they are used to that same teacher in the same room, they learn a set of rules and that is all they worry about. Whereas now, they have to learn 7 different teachers and 7 different classroom environments. They have never been in a class of 35 so its very scary to them and that. They are able to verbalize the fact that they know they are having a hard time adjusting and they know that because of their intelligence that they can recognize that they have social...that they don't have social skills they need. Which is an amazing process to (see) this happen in this little body and mind and that.

Um, see uh, they (reading from list) they think most of them don't get along with regular sixth graders. You know they feel different, and I think some of that I really believe is that they are so isolated in the elementary setting. That there is no preparation on the elementary end to come in and be part of a group other than themselves. And then, um, they talk about a couple of teachers don't tell you when to stop and then you get in trouble. And I think that they are referring to one specific teacher that doesn't have the classroom management skills necessary, but they recognize that. um, they don't feel as safe here. They've used those words, when they go to PE, when they are in the cafeteria, the other students have been in large group settings pretty much their whole elementary life, this group of

sixth graders haven't. The boys have an issue with it, they don't want teased in this particular case.

The boys are significantly smaller in stature and they have had a very difficult time adjusting. We've had some conversation with our elementary feeder schools about you know we are going to have to work on this, you know. So we know now as a school that we are going to have to have some intervention at the beginning of the year within our gifted classes to help these kids with the skills and allow them to talk this out instead of letting it go on for all year long before we realize it's happening. Because they are so smart, they don't want to bring up anything they can't do. You know the situation got so bad you don't want to come to school any more. That's how we found out, cause they are very good at hiding how they are feeling and putting on a skit of what you expect them to be.

Observations

"Observation is an important data collection tool to use at the beginning of a qualitative investigation. Knowledge of the context can be obtained while identifying specific incidents and behaviors as reference points" (Merriam, 1998, p. 82). In this study the researcher observed gifted classes, regular education classes, cafeteria, exploratory opportunities, and celebrations. During the observations the researcher utilized the procedures as outlined by Stake (1995) in "keeping a good record of events to provide a relatively incontestable description for further analysis and ultimate reporting" (p. 62). Verbal and nonverbal exchanges that were relevant indicators to the study questions were noted. The observations were also conducted to compare findings from interviews. "This firsthand observation of the researcher and subsequent interpretation based on the researcher's knowledge and expertise allow the findings to be substantiated" (Merriam, 1998, p. 83).

The findings at Middle School A substantiated the information that was obtained in the interview. Through observations and the verbal exchanges, it was determined that this school did not utilize flexible scheduling, regrouping, or independent study. Individual teachers did set up learning centers at various times throughout the school

year, utilizing various hands-on activity events as well. Some students were given the opportunity to accelerate through courses at their own rate; however, this was on a case-by-case basis and individual schedules were created to assist those students. No learning centers were noted. Student interest activities were utilized sparingly during the school day. Instruction was delivered in the regular classroom on a daily basis. The students were grouped with regular education peers to receive their enrichment within the regular classroom. No advisee period was noted.

The findings at Middle School B substantiated the information that was obtained in the interview. Through observations and the verbal exchanges it was determined that this school did not utilize regrouping or acceleration. The teachers sparingly utilized flexible scheduling, independent study, and learning centers. No advisee program was present. Students were grouped homogeneously throughout the day for their core classes. Students were included in regular education classrooms for elective classes and physical education. Student interest activities occurred rarely.

The findings at Middle School C substantiated the information that was obtained in the interview. Through observations and the verbal exchanges, it was determined that this school did not utilize learning centers, acceleration, or student interest activities. Regrouping was utilized during special activities that did not disrupt other classes. Individual teachers assigned independent study projects and portfolios sparingly during the school year. Teachers were given full autonomy over the schedule in their teams; however, flexible scheduling took place just a few times a year. No advisee or enhancement period was present. Each student was assigned to a guidance counselor. Gifted students received instruction in the regular classroom for elective and physical

education. Most of their day was in homogeneous gifted classrooms with a team approach.

The findings at Middle School D substantiated the information that was obtained in the interview. Through observations and the verbal exchanges, it was determined that this school did not utilize flexible scheduling, regrouping, learning centers, or student interest activities. Acceleration was offered on an individual basis, especially evident in math. No advisee period was evident; however, students did meet with a homeroom teacher quarterly. Students spent a majority of their day in self-contained homogeneous gifted classrooms aside from elective and physical education classes.

The findings at Middle School E substantiated the information that was obtained in the interview. Through observations and the verbal exchanges, it was determined that this school did not utilize flexible scheduling or acceleration. Students were organized into teams that did utilize regrouping several times during the school year. Individual teachers engaged the students in independent study activities; however, they were teacher driven and used sparingly throughout the year. This school created interdisciplinary learning centers that were rotated by subject areas and referred to as “learning stations.” Student interest activities were scheduled a few times a year. No advisee period was evident; however, students were assigned to an individual guidance counselor. Students in sixth grade were in homogeneous self-contained gifted classrooms most of their day. Seventh and eighth graders were in heterogeneous settings for most of their core classes on a daily basis.

The findings at Middle School F substantiated the information that was obtained in the interview. Through observations and the verbal exchanges, it was determined that this school did not utilize regrouping, student interest activities, or learning centers. Flexible

scheduling occurred through a team approach and allowed for special academic activities sparingly throughout the year. Individual teachers assigned teacher-driven, open-ended independent study projects very sparingly. No advisee period was evident. Each student was assigned to a guidance counselor. Gifted students spent a majority of their day with gifted peers. Acceleration was done on an individual basis for students to advance a grade level. Sixth grade was self-contained, and seventh and eighth were homogeneously grouped for most of their core classes. They received instruction in elective and physical education classes with their non-gifted peers.

The findings at Middle School G substantiated the information that was obtained in the interview. Through observations and the verbal exchanges, it was determined that this school did not utilize flexible scheduling, regrouping, or student interest activities. Students were permitted to accelerate through class work at their own rate, but no course or grade acceleration was present. Independent study was utilized by individual teachers sparingly, mostly in the form of projects that were teacher directed. Learning centers were evident in science and some in math; however, not consistently throughout the year. No advisee period was evident. Students were assigned to an individual guidance counselor. Students received instruction in a heterogeneous setting 100% of their day utilizing differentiated instruction.

The findings at Middle School H substantiated the information that was obtained in the interview. Through observations and the verbal exchanges, it was determined that this school did not utilize flexible scheduling, regrouping, or learning centers. Independent study was very evident in some classrooms that utilized the active classroom program. Students were able to accelerate through certain units at their own rate; however, no course or grade acceleration was evident. Student interest activities were held

occasionally throughout the school year. No advisee period was evident. Students were assigned to an individual guidance counselor. Students spent approximately 50% of their day with regular education peers for certain classes such as math, science, electives, and physical education. The other classes were homogeneously grouped with gifted students.

The findings at Middle School I substantiated the information that was obtained in the interview. Through observations and the verbal exchanges, it was determined that this school did not utilize flexible scheduling or regrouping. Individual teachers utilized teacher-directed independent study portfolio activities. Learning centers were apparent in science and math on an occasional basis. Students could progress through assignments at their own rate; however, no grade or course acceleration was evident. Student interest activities were very rare, limited to maybe once a school year. No advisee period was evident. Students were assigned to an individual guidance counselor. Gifted students were in heterogeneously grouped classes 100% of their school day.

The findings at Middle School J substantiated the information that was obtained in the interview. Through observations and the verbal exchanges, it was determined that this school did not utilize flexible scheduling or regrouping. Individual teachers utilized teacher-directed independent study portfolio activities. Learning centers were utilized for technology purposes by most teachers. Students could progress through assignments at their own rate; however, no grade or course acceleration was evident. Students participated in quarterly student interest activities that were based on interdisciplinary units. No advisee period was evident. Students were assigned to an individual guidance counselor. Students were grouped in homogeneous gifted classrooms for all core subjects except math and elective classes.

The findings at Middle School K substantiated the information that was obtained in the interview. Through observations and the verbal exchanges, it was determined that this school did not utilize flexible scheduling or regrouping. Independent study activities were present in social studies and reading. Learning centers were evident only in science classes. Acceleration of grade was permitted on an individual student basis. Student interest activities were scheduled occasionally throughout the school year. No advisee period was evident. Students were assigned to an individual guidance counselor. Students were grouped a majority of their school day with gifted peers. Most elective and physical education classes also seemed to contain this same subset of gifted students.

Summary

Interviews and observations were conducted at 11 middle schools with gifted education programs. The focus of the research was to look for the existence of eight components of middle school gifted education delivery models that have been identified by the literature. The eight components were: flexible scheduling, regrouping, independent study, learning centers, acceleration, student interest activities, guidance component, and instruction within the regular classroom with enrichment.

Most components were either not evident or evident only to a small degree within the schools. Each school had a different combination of components and to different degrees. Every school had at least one component. It was apparent from this research that all middle schools in this study had surrendered many middle school concepts to make way for increasing populations, scheduling demands, and increasing pressures from accountability measures and high-stakes testing. All schools mentioned the exodus from a pure middle school format as a byproduct of increasing mandates and pressure from the state and federal government.

These eight components, though evident to a small degree during the course of this study, were indicated by all schools to have existed at some point in the last 5 years, raising interesting points to consider regarding the impact of the State of Florida's recent accountability plan. All schools also mentioned that their school had met to consider implementing many discontinued components for the 2005-2006 school year.

The literature indicated the existence of components that are in congruence with both middle school and gifted education. However, in this study, pressures the schools felt from state and local legislation made it very difficult for them to implement many components. It also appeared from observations and discussions that these components were considered as "fluff that used to enhance our programs, but those were simpler times," as stated by MSB. Teachers and administrators alike reported feeling pressures from high-stakes testing that have created a more rudimentary approach to educating gifted middle school children. The focus now seemed to be how to cover the most material with the most students with limited funding and space and get it all crammed in before the Florida Comprehensive Assessment Test (FCAT).

This particular school district underwent restructuring a few years ago. Most components studied in this research were eliminated from the schools at that time. Many interviews and observations conducted at the schools revealed that the middle school gifted students received little, if any, variation in curriculum or instruction different from the regular education students within those schools. Many gifted students were in the same classes as all the regular education students; and the opinion of this researcher was that the gifted students were receiving no extra services than their regular education peers. The teachers often cited the opportunity for the gifted students to do extra projects or to study in alternative ways "if the students requested it." The gifted middle school

student, in the opinion of the researcher, was not likely to request extra or additional school work without adult guidance. The literature revealed the need of enrichment activities and flexible scheduling and regrouping activities to allow the advanced middle school student to fully develop his or her talents. However, it appeared that, while the schools do believe that these components benefit the students, increasing regulations had them bewildered as to how to implement them. The questions on the minds of these educators was not whether these components must exist in a successful middle school gifted education program, but instead how they were to put theory into practice in the wake of high-stakes testing.

CHAPTER 5 CONCLUSIONS AND RECOMMENDATIONS

Introduction

This study identified components of both middle school education and gifted education that are compatible across both sets of models. The specific focus of this study was on program delivery models. Delivery systems incorporated components that were related to scheduling and organization of both academic and co-curricular activities, as well as other student support services (Chance, 1992). A component was identified as part of the delivery system if it referred to organization, scheduling, or structure of the total school environment or if it referred to student support services, total school programming, or staffing decisions.

Statement of the Problem

The problems associated with the implementation of a middle school gifted education program are the central focus of this study. Specifically, the study addressed the following questions:

1. What are the major components identified by existing middle school models?
2. What are the major components identified by existing gifted education delivery models?
3. What categories are compatible themes across both gifted education and middle school education delivery models?
4. What components of middle school education and gifted education are present in the middle schools of the large public school district studied?
5. What components of middle school education and gifted education most frequently occur in conjunction with one another?

A sample of gifted education models was studied to determine commonly identified components of gifted education program delivery. A sample of middle school education models was then studied to determine commonly identified components of middle school education program delivery. These components were then analyzed to determine which components appeared to be compatible across both gifted education and middle school education models.

An interview questionnaire was developed from the commonly identified components of gifted education models as well as middle school education models. The interviews were conducted with 11 middle school principals or their designees, from all of the district middle schools. The information gathered in the interviews was then compared to campus observations made at each school. That information was summarized and compared to the delivery models presented in the literature.

Conclusions

Research Question 1: What are the major components identified by existing middle school models?

The middle school models had many common components in relation to the delivery system. Team teaching appeared in all six models, and team planning or conferencing appeared in over half the models. Six of seven models recommended thematic units and interdisciplinary instruction. Continuous progress or non-graded approaches that included alternate pacing or acceleration appeared in four of seven models. A guidance component made up of teachers was also evident in a majority of the models.

Research Question 2: What are the major components identified by existing gifted education delivery models?

All gifted education models recommended the use of enrichment activities within the regular classroom as part of the program delivery for gifted education. Special classes that included a heterogeneous setting also occurred throughout five of six models. Apprenticeships and independent learning activities were also noted in five of six models. Learning centers, exploratory activities, flexible scheduling, and acceleration were also represented in a majority of the models, noted in four of six models.

Research Question 3: What categories are compatible themes across both gifted education and middle school education delivery models?

The gifted education models had many components in common with the middle school education models. Independent study and exploratory or student interest activities were among the top components that were recognized across both disciplines. Flexible scheduling and enrichment activities were also consistently included as components of both middle school and gifted education models. The use of some form of acceleration, which was noted by over half of the models studied, was described in eight different component sections. Providing a guidance component was emphasized as an important element to both middle school and gifted education models as well.

Research Question 4: What components of middle school education and gifted education are present in middle schools of the public school district studied?

Interviews and observations were conducted at 11 middle schools with gifted education programs. The focus of the research was to look for the existence of eight components of middle school gifted education delivery models that had been identified in the literature. The eight components were: acceleration, exploratory classes, student interest activities, independent study, learning centers/individual pacing, flexible

scheduling, regrouping, instruction within the regular classroom with enrichment, and a guidance component.

Most components were either not evident or evident only to a small degree within the schools. Each school had a different combination of components and to different degrees. Every school had at least one of the components.

Research Question 5: What components of middle school education and gifted education most frequently occur in conjunction with one another?

Table 5-1 lists common components of the models studied that were identified in interviews by the 11 middle school principals/designees from the participating schools.

Table 5-1. Common Components in Gifted Education and Middle School Education Models

Theme	Schools
Acceleration	A, D, F, G, H, I, J, K
Exploratory classes	A, B, C, D, E, F, G, H, I, J, K
Independent study	B, C, D, E, F, G, H, I, J, K
Learning centers/ individual pacing	A, B, D, E, G, H, I, J, K
Flexible scheduling	B, C
Regrouping	C, E
Enrichment within regular classroom	A, B, C, D, E, F, G, H, I, J, K
Guidance component	A, B, C, D, E, F, G, H, I, J, K
Student interest activities	A, B, E, H, I, J, K
Independent study/study skill centers	B, C, D, E, F, G, H, I, J, K

The most frequent combination of components was independent study along with learning centers. These components appeared to be the most obvious combination in that they included teacher autonomy over how the program was delivered. A majority of the schools that allowed some form of acceleration also had independent study and learning centers. Schools with flexible scheduling and regrouping also had a majority of the other components in their school. Student interest activities were greatly linked with

independent study and learning centers. Only one school had both flexible scheduling and regrouping.

Discussion of Findings

This study sought to understand the perceived conflict between middle school education and gifted education. Interestingly, through the review of literature and content analysis, it appears that the two disciplines have far more in common than hypothesized. Through this research, eight components of program delivery were found to be shared by both middle school and gifted education theory. The existence of these eight components is proof that peaceful coexistence of the two programs is very possible.

The problem addressed by this research—the premise of the study—was whether or not gifted education programs can be delivered effectively in a middle school setting. The conclusions drawn were that middle school and gifted education theory do have many components in common; and, if done properly, both can be delivered effectively together. This study, as performed, however, has uncovered further questions, due to the lack of a true middle school presence. The study has indicated that most of the middle school concept has been abandoned, making it exceedingly difficult to truly examine whether the two can coexistence in practice. Not only was the middle school concept detrimentally mutated, so too was the gifted education program. Neither program seemed to contain any of the elements indicated as essential by current theoretical models. Before future studies can be done to examine the successful implementation of gifted education within a middle school model, another phenomenon must also be explored. Thus, it is important to consider factors that have led to their disappearance.

Will these programs ever be able to exist ideally in the presence of so many external influences on the educational environment? With the advent of standardized

testing, school leaders have been forced to make decisions that have not historically been within their realm of responsibility. In addition to pressures to promote the general educational welfare of the students, they are feeling external and internal political and financial pressures. In recent years in Florida, the adoption of a system of grading schools has had major impact upon the decisions educators are making. The impact of the school grading system on the surrounding community is widely felt and based on individual perceptions. The effect of a single school grade is far reaching. Property values, re-zoning issues, bonus salaries, and political campaigns are all major issues associated with each community's school grade. This has created added pressure on school administrators. The school leaders have had to look for fast solutions to problems surrounding poor student performance.

Interviews and campus observations of the middle schools and gifted programs within this Florida school district seem to offer proof that both programs are in danger of extinction. What are the reasons for this? Middle school and gifted education programs have existed for decades, and the literature and past research have supported their existence. Yet somehow these programs have been endangered by the recent trends encountered in the wake of the accountability movement. There are several plausible reasons for the mutation of both programs, as evidenced by this body of research.

The accountability movement has greatly affected the logistics of delivering a gifted education program within a middle school model. Many educational leaders who were interviewed for this study indicated that it had become too difficult for them to continue the middle school model. This was due primarily to the need for schools to find a way to improve test scores. Funding an additional planning period or enhancement session for teachers and students has become secondary to providing additional tutorials

and computer programs that would improve student achievement on standardized tests. After all, it is the student scores on these tests that determine the grade a school will receive at the end of a school year. With this new emphasis on grading the schools, educational leaders began to feel tremendous pressure to “make the grade.” To accomplish this, the schools must improve the grades of the students who are not meeting proficiency standards. Therefore, time, money, and effort have shifted more toward student achievement on the test and away from child-centered activities, developing school moral, and enhancing student interests.

The accountability movement has also affected the gifted program. Many school leaders began to believe that the gifted students would be just fine on their own. They made comments such as, “The gifted kids will make it on their own; they will be fine no matter where we put them” (MSG). This sentiment was shared by many. Because gifted students were already their top performers on state assessments, school leaders began to put their emphasis on the low performers as their best chance of increasing their school grade. Helping the high achievers become more successful is now much lower on their ever-increasing list of priorities.

Decisions made by educational leaders have impacted all aspects of the school. For example, many schools have found ways to use fiscal creativity. Several schools in this study began to utilize categorical funding for small programs in ways that impacted more students to benefit the school as a whole. Having a class with only six gifted students, for example, seemed like a waste of resources to some school leaders. Through creative scheduling and ingenious labeling, schools were able to “dual roster” students by placing the gifted students with regular education students (MSG). Now this allowed those six students to be in a class of 30 and that gifted resource teaching unit to benefit many more

students. This increase in numbers for advanced students makes room for smaller class sizes in remedial or tutorial classes for students needing extra assistance.

This kind of move has occurred quickly, with little thought about the training teachers would need to properly integrate gifted students within a regular classroom or to provide enrichment. Thus, teachers continue to teach to the middle, and assessment standards as curriculum guides become their teaching manuals. Each year since this practice began, the instructional integrity of gifted programs has been slowly whittled away. Instructional leaders began to focus more on remediation. Each year the focus has slipped further away from gifted programs until now we have now reached an all-time low, and gifted teachers can only recall what used to be.

Instructional Leadership

Aside from the slow mutation of gifted education and middle school education, we must look at the time spent to train educational leaders and teachers. Most educational leaders interviewed for this study were unfamiliar with gifted theory or practice. Most only recalled days of the existence of a middle school concept and were not well versed on how it could actually be implemented. It is obvious that instructional leaders who are not knowledgeable in these areas likely could not assure the well-being of gifted education and middle school education.

Differentiated Curriculum

There appears to have been a fundamental curriculum shift coinciding with the accountability movement. The move toward a standards-based curriculum has resulted in a shift away from differentiated curriculum. Tomlinson and George (2004) recommended a differentiation of the curriculum used for middle school gifted students that has been a practice of many middle school gifted programs for years (Swaim, 2003).

Differentiation allows the gifted students to experience depth as well as breadth of the curriculum. However, the evidence of this study suggests that gifted students now are receiving the same standard curriculum as regular education students. “We have curriculum to cover, these kids all have to get it, so we have to make sure we teach everyone the core” (MSB). The standard curricula to which they refer were the benchmarks created by the Sunshine State Standards (SSS). The SSS set a standards-based curriculum for all students and all subjects in Florida (Swaim, 2003); questions were derived from these standards for the Florida Comprehensive Assessment Test (FCAT). Thus, in hope of optimal outcomes on the FCAT, school leaders have abandoned special enhanced curricula and have a standards-based approach for everyone.

The next steps for school leaders will be re-education. In order to achieve improvements in these fields, theories must be re-examined, and successful schools must be utilized as models. Schools have abandoned what took 20 years to make. A true middle school program must be taught from the ground up. Teachers must understand the theory behind the practice. Educational leaders must be trained in what an effective middle school looks like. They must promote and support quality instruction based on sound educational beliefs and must have the integrity to make decisions that will positively impact the school, the students, and the mission. This is also true of gifted education. Gifted teachers must be properly trained in how to deliver gifted education effectively within a variety of settings. It is not adequate to train teachers on how to deliver instruction within a self-contained classroom and then assign them to teach in a regular education enrichment program. Instructional leaders must respect the integrity of gifted programs and offer support and encouragement to all participating staff and students.

With the new accountability standards and grading practices, it has become easy for the general population to make judgments about the effectiveness of a school. It is important for schools to maintain high standards and to prove their successes to the public. However, it is important to remember that educators are in the schools for a reason. They are the ones with the knowledge and skills to make students successful. Politicians, parents, and the public have demanded reassurance of school effectiveness. However, how that success will be accomplished is up to the educational system.

Recommendations

This descriptive single case study sought to answer five research questions. The researcher wanted to determine what components were common to both middle school and gifted education and to identify which were actually being utilized in current middle schools during the 2004-2005 school year. Results of this study suggested that many schools had moved away from many middle school components, thereby also eliminating many components identified as compatible with gifted education. Most components were only present to a small or minimal degree. A majority of the school administrators indicated that they would be changing their format for the 2005-2006 school year to include many components indicated in this study.

Many administrators cited the No Child Left Behind Act, recent Florida-mandated reading initiatives, as well as pressure from high-stakes testing as reasons for the absence of many components. They indicated that pressure to advance through the curriculum or to meet student performance standards was a reason for not implementing things such as flexible scheduling and regrouping. These standards also placed pressure on the schools to maximize instructional time, therefore eliminating many of their special interest activities as well as student-driven independent learning.

This research study contributes to the knowledge base in both gifted education and middle school education by analyzing the educational models advocated by each group, as well as examining these concepts in practice through a case study of 11 middle school gifted education programs. The analysis conducted through this study identified compatible themes across both disciplines, thus creating an impetus for further study and the creation of an effective middle school gifted education model. Based on this research, it appears that an effective middle school gifted education model should be developed to address such concerns of school administrators as: teaching allocations provided for the gifted students, financial considerations, scheduling dilemmas, and implementation of a true flexible schedule, classroom space and physical environment, student population, and gifted teacher qualifications and training. The focus of this particular research was on the program delivery model of gifted education in middle schools, including factors such as scheduling, student grouping, and peer interaction.

This research identified several components of effective middle school gifted education. The evidence from this study demonstrated, to a large degree, the absence of these components. These data suggest that public schools have begun to make a shift away from programs focused on the top 3% of the population in order to place emphasis on remediation of the bottom 3%. Through observations and interviews, it became apparent that the schools had utilized funding, resources, and personnel to institute many programs, special classes, and intensive curricula to assist students performing in the lowest 25th percentile on state standardized testing. This focus has left few resources and time to devote to the development of a quality program to assist students, who for the most part are already performing in the top 25th percentile on standardized tests.

Through this research it became evident that many schools had gifted programs in name only. Many school administrators agreed with the MSD interviewee: “We put the kids in with the regular ed kids, [and] they do fine. They will make it wherever we put them, you know.” They shared this sentiment, citing the perseverance and skill level of the gifted student as a fall back for the lack of money or time spent to help them maximize their educational potential.

The impact of high-stakes testing has certainly taken its toll in the middle school gifted program within this district. The push for students to score in the top percentiles on the FCAT has left many educators scrambling to assist students in improving test scores. The gifted students tend to be the students already scoring in the top percentiles on the tests; therefore, the accountability measures seem to be failing them most. It may be helpful for the gifted program to maintain accountability by tracking student yearly growth to be sure that these students are making gains to match their potential. This requires continual evaluation of gifted services to assure that students are being properly served.

This research sought to prove the existence of essential middle school and gifted education components in one central Florida school district. However, the most important conclusion that can be drawn from this study may lie in the absence of any concrete gifted program at all. The lack of effort or resources dedicated to the gifted program within these middle schools lends itself to the need for further future research in this area. Public educational institutions would benefit from further study into the causes of such apparent neglect. The deterioration of a true middle school gifted program is something that has occurred over time. Finding the root of this problem is the first step to help rebuild an effective program in these schools.

Carol Tomlinson (1995) offered some suggestions for helping educators address some issues identified by this research:

1. acknowledge strengths and contributions of both practices
2. use constructive language when discussing the issues
3. communicate, cooperate, and collaborate at every level of educational practice
4. recognize that early adolescents share common affective needs, but experience them in differing ways
5. plan for both achievement and belonging for advanced learners
6. acknowledge the appropriateness of collaborative learning for early adolescents
7. emphasize problem-based cooperative strategies rather than skill-focused cooperative strategies
8. move away from cooperative learning as a "savior" strategy
9. teach and balance cooperation, independence, and healthy competition
10. use various grouping patterns in cooperative groups, based on instructional purpose.

Implications for Future Research

Within gifted and middle school education, the implications of this study are vast. The completion of this study allowed the researcher to identify issues for future study:

Other Areas of Gifted and Middle School Education

There are other areas of gifted education and middle school education aside from program delivery system. This study focused solely on program delivery; however, instruction and content were two other areas identified by the literature. Similar studies could be done addressing these other major areas of gifted and middle school education.

Educational Standards and Components

Another research recommendation is to identify the established educational standards of both middle school education and gifted education and to determine if the

educational standards have identified the compatible components found in this study. It would be interesting to look into the identified standards to compare which standards are identified in the models studied and to then identify and classify the components that were not identified in this study.

School Follow-up

Six of the 11 schools noted that next year they planned to change back to a more middle school model. These schools indicated that next year they would employ many components addressed in this study. An interesting future study may be to examine these same schools next school year to see if they were able to carry through with their good intentions, to compare their current components with the components of the preceding year, and to create a questionnaire based on their satisfaction with the new delivery model.

Statewide Research

This study limited its scope to a large public school district in Central Florida. Future research studies may broaden this scope to all Florida middle school gifted programs. That scope may be further defined to look at different regions of the state to determine if demographics, population, or financial status affect the program delivery model for the gifted education program within the middle schools. It may be of further interest to determine why some middle schools do not have an active gifted program. To determine what factors lead to the decision to have a gifted program, the study could be extended to schools that serve Grades 6-8 and have a gifted program but do not operate under the middle school concept.

Teacher Training

If a model is to be developed from these data, it may be necessary to change how teachers are prepared to teach in a gifted education program within a middle school. “There may exist a need to alter teacher preparation programs in order to implement the practices suggested by middle school education and gifted education models” (Chance, 1992, p. 42). Teachers may need to be trained more in-depth on how to meet the emotional and social needs of an adolescent while, at the same time, understanding human development and varied learning styles. “Research on effective teaching and effective schools held out the promise that student learning could be improved by marginal changes in teachers’ behaviors and school structure” (Elmore, 1992, p. 47).

Educational Evaluation

Another implication of this study is in the area of educational evaluation. This study has suggested conflicting as well as compatible components across middle school and gifted education program delivery. This may demonstrate the need for schools and school districts to examine the components within their own schools to determine if the combination of components across their school system is effective. Changing or replacing even one component can greatly alter the effectiveness of each school’s gifted program at the middle school level. It would prove beneficial for each school to study their own indicators of success along with the components of their program to determine what changes may be beneficial.

The Future of Gifted Education in Middle Schools

As shown in the literature review, many theorists hypothesized that gifted education was becoming virtually extinct. This research supports those predictions, at least according to the original definition of gifted education and its components utilized

in this study. The lack of gifted components, as well as the attempt by many schools to combine gifted education with other programs, has whittled the program into virtual nonexistence in the middle school setting. Middle school gifted education, as evidenced by this research, appears to exist in name only. The focus of educators and legislators has pulled away from programs to support the intellectually advanced in favor of implementing programs to assist underperforming students. The interviews conducted in this study were primarily with school administrators, and observations were conducted within actual gifted classrooms. However, it is possible that parents, other teachers, and even students would have been able to add information about the apparent lack of middle school gifted education. The input from these other groups could possibly have painted an even more grim picture of middle school gifted education.

The results of this study demonstrate the urgent need for educators to look at gifted education implementation—adequacy, absence, or deficiency—in middle schools.

Summary

This study identified areas of compatibility across models of gifted education and middle school education. These results provide a foundation for future investigations into the current practices of middle school education and gifted education. Through the results of this study and future educational findings, the effectiveness of middle school education may be improved for gifted students as well as all students.

The information gathered in this study can be used to develop an effective model for delivering middle school gifted education. The use of compatible components across both models can assist in developing a system that allows two conflicting philosophies of education to be combined into an effective gifted program for adolescent students in Grades 6-8.

APPENDIX A

INTERVIEW QUESTIONS

Does your school use flexible scheduling?

- 0- Never
 - 1- Have an occasional activity day or special project that allow teachers to change the schedule
 - 2- Allow teachers to adjust schedule at least once a week
 - 3- Allow teachers full authority over creating and implementing their team schedule
-

Does your school use regrouping?

- 0- Never
 - 1- During special activities only
 - 2- During a weekly or monthly block or group schedule
 - 3- Teachers have full autonomy to regroup students daily as needed
-

Does your school use independent study as part of the curriculum for gifted students?

- 0- Never
 - 1- Individual teachers assign independent study assignments sparingly throughout the school year
 - 2- Weekly or monthly portfolio or individual assessment projects
 - 3- Each student completes a contract of independent study/ research for school curriculum
-

Does your school use learning centers as part of the curriculum for gifted students?

- 0- Never
 - 1- Individual teachers use learning centers sparingly in their classrooms during the year
 - 2- Each team creates interdisciplinary activities that are rotated by subject area
 - 3- Students participate in small group instruction daily with enrichment activities and practice
-

Does your school use individual pacing as part of the curriculum for gifted students?

- 0- Never
 - 1- Students may progress through individual teacher work at desired pace
 - 2- Students advance through courses at their own rate
 - 3- Students can earn credits and advance through yearly curriculum at their own pace
-

Does your school incorporate student interest activities as part of the total curriculum?

- 0- Never
 - 1- Occasionally through the school year
 - 2- Students participate in weekly or quarterly interest activities
 - 3- Daily exploratory or interest classes or activities
-

Does your school utilize a guidance component in which teachers act as individual advisors to students (i.e., each student is assigned to an adult advisor)?

0- Never

1- Each student is assigned to a guidance counselor

2- Each student is assigned to a teacher they see each week to discuss progress, issues etc.

3- Each student is assigned to a teacher they see each day to discuss progress, issues, etc.

Do the gifted students within your school receive instruction in the regular classroom with enrichment?

0- Never

1- Instruction within regular classroom at various times throughout the year

2- Instruction within regular classroom weekly

3- Instruction within regular class daily

APPENDIX B
GLOSSARY OF TERMS

Flexible scheduling, or **modular scheduling**, usually refers to school schedules in which classes are taught for different lengths of time on various days. For the best effect, classes are also different sizes. For example, a lecture may be given to a large group for a relatively short time, but a seminar discussion would have fewer students for a longer class period. Innovative secondary schools tried flexible scheduling in the late 1960s and 1970s, but few schools use it today. Many schools do use block scheduling, however, in which all classes meet longer than the traditional 50 minutes.

Regrouping Reorganizing class or team assignments to allow for students and teachers to meet with different groups according to curriculum or interest needs.

Social skill development lessons and other experiences intended to help students learn to control their emotions and to work and play with others. Several research-based programs have been developed and tested. Advocates strongly advise a planned, sequential curriculum with time set aside for SEL just as it is for other important goals.

Independent learning Students are given the opportunity to choose the curriculum, and given time to conduct research and develop an understanding of the concept using real-world activities under their own direction.

Learning centers A location within a school where structured mentoring occurs and assistance is offered through tutors, workshops, computer programs, or audiovisual equipment in reading, writing, math, and skills such as taking notes, managing time, taking tests.

Individual pacing Students advance through a set curriculum/grade at their own pace and can move through at their own pace regardless of the pace of the students in their class or team.

Student interest activities Events designed around student participation and interests that develop social, emotional, academic, and physical skills.

Discovery process/ research discovery learning takes place most notably in problem-solving situations where the learner draws on his own experience and prior knowledge to discover the truths that are to be learned. It is a personal, internal, constructivist learning environment.

Thematic interdisciplinary units Both integrated curriculum and interdisciplinary curriculum are intended to help students see connections, but unlike an integrated curriculum, an interdisciplinary curriculum draws its content from two or more identifiable disciplines. (Thematic Unit) A segment of instruction focused on a given theme. School courses are frequently divided into units lasting from one to six weeks. For example, a literature course might include a four-week unit on The Individual and Society.

Guidance component Assigns individual students to teacher or guidance counselor to allow for individual daily or weekly monitoring.

Intramural sports program Students within the school are formed into teams and participate in a sports program where teams are matched for play against one another.

Teacher teams An arrangement by which two or more teachers teach the same group of students. Teachers may teach together in many different ways. They may teach a course, or a combination of courses, for an entire school year, or they may plan and teach a particular unit of study. They may present content from the same, or different, subject areas. And they may keep the students in a single large group or divide them up for some purposes.

Common plan Time All or part of the teachers on a team have the same plan period so that inter-team planning can be conducted.

Regular classroom with enrichment Topics and activities that are valuable and interesting to learn but are not basic education—knowledge that is "nice to know" but not necessarily what people need to know. Examples might include study of Wordsworth's poetry or a biography of Alexander Hamilton, although people will not necessarily agree on what is basic and what is enrichment.

Enrichment is applied to efforts that are made to supplement children's learning outside of school, such as trips to science and art museums, educational vacations, visits to local libraries, and attendance at local theaters, orchestras, or ballets.

Special classes This may include specially trained teachers, innovative technology or instructional materials, access to a resource room, or even external placement. The term sometimes (but not usually) includes programs for those considered gifted.

Mentors A role model who offers support to another person. A mentor has knowledge and experience in an area and shares it with the person being mentored. For example, an experienced teacher might mentor a student teacher or beginning teacher.

Some student mentoring programs are designed to help at-risk students succeed in school. Acting as role models, mentors spend time with individual students once or twice a week—encouraging, listening, making suggestions, and taking the student to events, activities, or the mentor's place of employment to help the student learn about a career and consider further education.

Apprenticeship Students work in the workplace under the guidance of mentors or tutors who take responsibility for the professional development of their apprentices.

Work/study experiences for students in which they learn about career possibilities while acquiring some advanced skills in the workplace to prepare for a highly skilled job.

Accelerated pace An educational approach that provides a child with the opportunity to progress through the curriculum at an accelerated pace, as in a gifted and talented program.

REFERENCES

- Alexander, W. (1968). *A survey of organizational patterns of reorganized middle schools. Final report.* Washington, DC: Office of Education (DHEW) Bureau of Research.
- Alexander, W. (1992). William C. Alexander: Father of the middle school. *Middle School Journal*, 23(5), 32-38.
- Alexander, W., & McEwin, C. K. (1988). *Preparing to teach at the middle level.* Columbus, OH: National Middle School Association.
- Alexander, W. M., Williams, E. L., Compton, M., Hines, V. A., & Prescott, D. (1968). *The emergent middle school.* New York: Holt, Rinehart and Winston.
- Alvino, J. (1994). *Parent's guide to raising a gifted child.* Boston: Little, Brown, and Company.
- Anhar, J. (1992). Enhancing students' feelings of school membership: What principals can do. *Schools in the Middle*, 1(3), 12-16.
- Ascher, C. (1992). *Successful detracking in middle and senior high schools.* New York: ERIC Clearinghouse on Urban Education. ERIC Document Reproduction Service No. ED351426
- Association for the Gifted. (1978). *Standards for programs involving the gifted and talented.* Reston, VA: The Council for Exceptional Children.
- Beane, J. A. (1990). *A middle school curriculum: From rhetoric to reality.* Columbus, OH: National Middle School Association.
- Beane, J., & Lipka, R. (1987). *When the kids come first: Enhancing self-esteem.* Columbus, OH: National Middle School Association.
- Becker, H. (1983). *Opportunities for learning: Curriculum and instruction in the middle grades.* New York: Johns Hopkins Center for Research.
- Berzonsky, M. D. (1981). *Adolescent development.* New York: Macmillan.
- Bireley, M., & Genshaft, J. (Eds.). (1991). *Understanding the gifted adolescent: Educational, developmental, and multicultural issues.* New York: Teachers College Press.

- Bogdan, J., & Sullivan, C. (1992). Today's education policy environment. *Journal of School Health*, 63(1), 28-32.
- Bowers, J., & Courtright, J. (1984). *Communication research methods*. Glenview, IL: Scott, Foresman.
- Braddock, J., & Slavin, R. (1989). *Tracking: Trends, effects, and alternatives*. Baltimore: Johns Hopkins Center for Research on Effective Schooling for Disadvantaged Students.
- Bruner, J. S. (1960). *The process of education*. Cambridge, MA: Harvard University Press.
- Buchanan, N. K., & Feldhusen, J. F. (1991). *Conducting research and evaluation in gifted education*. New York: Teachers College Press.
- Carnegie Council on Adolescent Development. (1989). *Turning points: Preparing American youth for the 21st century*. New York: Carnegie Corporation.
- Carnegie Council on Adolescent Development. (1996). *Turning points: Preparing American youth for the 21st century*. New York: Carnegie Corporation.
- Chance, P. (1992). *A model for gifted education in middle schools*. Ann Arbor, MI: UMI Press.
- Chance, P. (1998). Meeting in the middle: Gifted education and middle school working together. *Roeper Review*, 21(2), 133-138.
- Clark, B. (1991, February 22). Lecture given at Oklahoma Association of Gifted, Creative, and Talented Conference. Oklahoma City, OK.
- Clark, B. (1992). *Growing up gifted*. Columbus, OH: Charles E. Merrill Publishing Co.
- Cohen, C. S. (1997). *The effectiveness of peer coaching on classroom teachers' use of differentiation for gifted middle school students*. AA19737400
- Coleman, M. R., & Gallagher, J. J. (1995). The successful blending of gifted education with middle schools and cooperative learning: Two studies. *Journal for the Education of the Gifted*, 18, 362-384.
- Compton, M. F. (1984). Balance in the middle school curriculum. In J. H. Lounsbury (Ed.), *Perspectives: Middle school education, 1964-1984* (pp. 60-80). Columbus, OH: National Middle School Association.
- Compton, M. F. (1982). The gifted underachiever in the middle school. *Roeper Review*, 4(4), 23-25.

- Cox, J., Daniel, N., & Boston, B. (1985). *Educating able learners: Programs and promising practices*. Austin, TX: University of Texas Press.
- Delp, J. (1997). *A handbook for parents of gifted and talented*. Ventura, CA: Office of the Ventura County Superintendent of Schools.
- Eby, J. W., & Smutny, J. F. (1990). *A thoughtful overview of gifted education*. New York: Longman.
- Eichorn, D. H. (1966). *The middle school*. New York: The Center for Applied Research in Education.
- Elkind, D. (1967). Egocentrism in adolescence. *Child Development*, 38, 1025-1034.
- Elkind, D. (1970, April, 5). Erik Erikson's eight stages of man: One man in his time plays many psychosocial roles. *The New York Times*, 25-27, 84-88.
- Elmore, R. (1992). Why restructuring alone won't improve teaching. *Educational Leadership*, 49(7), 44-48.
- Epstein, S. (1973). The self-concept revisited: Or a theory of a theory. *American Psychologist*, 28, 404-416.
- Erikson, E. (1968). *Identity: Youth and crisis*. New York: W. H. Norton.
- Evertson, C., & Green, J. (1986). Observation as inquiry and method. In M. C. Wittrock, (Ed.), *Handbook of research and teaching* (3rd ed.), (pp. 162-213). New York: Macmillan.
- Feldhusen, J. (1985). *Toward excellence in gifted education*. Denver, CO: Love Publishing Co.
- Feldhusen, J. (1989). Program models for gifted education. In J. Feldhusen, J. Van Tassel-Baska, & K. Seely (Eds.), *Excellence in educating the gifted* (pp. 105-122). Denver, CO: Love Publishing Co.
- Feldhusen, J. (1990). From the editor. *Gifted Child Quarterly*, 34(2), 47.
- Feldhusen, J., & Teffinger, D. (1985). *Creative thinking and problem solving in gifted education*. Dubuque, IA: Kendall & Hunt.
- Fiedler, E. D., Lange, R. E., & Winebrenner, S. (2002). In search of reality: Unraveling the myths about tracking, ability grouping, and the gifted. [Special Issue: A quarter century of ideas on ability grouping and acceleration]. *Roeper Review*, 24, 108-111.

- Fox, L., & Washington, J. (1985). Programs for the gifted and talented: Past, present, and future. In F. D. Horowitz & M. O'Brien (Eds.), *The gifted and talented: Developmental perspectives* (pp. 197-222). Washington, DC: American Psychological Association.
- Fraenkel, J., & Wallen, N. (1996). *How to design and evaluate research in education*. New York: McGraw-Hill.
- Gallagher, J. (1979). Issues in education for the gifted. In A. W. Passow (Ed.), *The gifted and talented: Their education and development*. (The 78th Yearbook of the National Society for the Study of Education, Part I) (pp. 28-44). Chicago: University of Chicago Press.
- Gallagher, J. (1985). *Teaching the gifted child*. Boston: Allyn and Bacon.
- Gallagher, J., & Weiss, M. (1979). *Education of gifted and talented students: A history and prospectus*. Washington DC: Council for Basic Education.
- Gallagher, J., & Weiss, M. (1983). Parental educational preferences for gifted children. *Gifted Child Quarterly*, 30(3), 114-18.
- Gallagher, J. J. (1992). Gifted students and educational reform. In: *Challenges in gifted education: Developing potential and investing in knowledge for the 21st century*. Columbus: Ohio State Department of Education. ERIC Document Reproduction Service No. ED344404
- Gallagher, J. J. (1993). Ability grouping: A tool for educational excellence. *College Board Review*, 168, 21-27.
- Gallagher, J. J. (1996). A critique of critics of gifted education. *Journal for the Education of the Gifted*, 19(2), 234-49.
- Gardner, H. (1985). *Frames of mind: The theory of multiple intelligences*. New York: Basic Books.
- Gardner, J. (1961). *Excellence: Can we be equal and excellent too?* New York: Norton and Co. Inc.
- George, P. (2001, December). The evolution of middle schools. *Educational Leadership*, 40-44.
- George, P., & Renzulli, J. (1997). *Dilemmas in talent development in the middle grades: Two views*. Columbus, OH: National Middle School Association.
- George, P. S. (1984). Middle school instructional organization: An emerging consensus. In J. H. Lounsbury (Ed.), *Perspectives: Middle school education, 1964-1984* (pp. 54-67). Columbus, OH: National Middle School Association.

- George, P. S., & Alexander, W. (2003). *The exemplary middle school*. Belmont, CA: Wadsworth.
- George, P. S., & Oldaker, L. L. (1985). *Evidence for the middle school*. Columbus, OH: National Middle School Association.
- Guerrero, J. K. (1995). *Serving the advanced middle school learner in the heterogeneous classroom*. Paper presented at the Annual Meeting of the American Educational Research Association (San Francisco, CA, April 18-22, 1995). ERIC Document Reproduction Service No. ED385361
- Guilford, J. P. (1967). *The nature of human intelligence*. New York: McGraw-Hill.
- Hall, E. G. (1983). Recognizing gifted underachievers. *Roeper Review*, 5(4), 23-25.
- Hall, G. S. (1905). *Adolescence: Its psychology and its relations to psychology, anthropology, sociology, sex, crime, religion, and education*. New York: Appleton.
- Hildreth, G. H. (1966). *Introduction to the gifted*. New York: McGraw-Hill.
- Hirsch, E. D., Jr. (1996). *The schools we need: Why we don't have them*. New York: Doubleday.
- Holsti, O. R. (1969). *Content analysis for the social sciences and humanities*. Reading, MA: Addison-Wesley.
- Howley, A., Howley, C. B., & Pendarvis, E. D. (1986). *Teaching gifted children: Principles and strategies*. Boston: Little, Brown, and Company.
- Johnson, J. H., & Markle, G. C. (1986). *What research says to the middle level practitioner*. Columbus, OH: National Middle School Association.
- Kaplan, S. N. (1974). *Providing programs for the gifted and talented: A handbook*. Ventura, CA: Office of the Ventura County Superintendent of Schools.
- Kindred, L. W., Wolotkiewicz, R. J., Mickelson, J. M., & Coplein, L. E. (1981). *The middle school curriculum: A practitioner's handbook*. Boston: Allyn and Bacon.
- Kratwohl, D. (1980). *Taxonomy of Educational Objectives, the classification of educational goals-Handbook II: Affective domain*. New York: McKay.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Newbury Park: Sage Publications.
- Lindkvist, K. (1981). Approaches to textual analysis. In K. Rosengren (Ed.), *Advances in content analysis* (pp. 23-41). Beverly Hills, CA: Sage Publications.

- Lipsitz, J. (1984). *Successful schools for young adolescents*. New Brunswick: Transaction Books.
- Lounsbury, J., & Clark, D. (1990). *Inside grade eight: From apathy to excitement*. Reston, VA: National Association of Secondary School Principals, p. 8.
- Lounsbury, J. H., & Vars, G. E. (1978). *A curriculum for the middle years*. New York: Harper and Row.
- Maker, C. J. (1982). *Curriculum development for the gifted*. Rockville, MD: Aspen Publications.
- Maker, C. J. (1986). *Critical issues in gifted education*. Salem, MA: Aspen Publications.
- Marland, S. P., Jr. (1971). *Education of the gifted and talented*. (Report to the Congress of the United States by the U. S. Commissioner of Education). (HE 5.2:G36/2). Washington, DC: Government Printing Office.
- Melton, G. E. (1984). The junior high school: Successes and failures. In J. H. Lounsbury (Ed.), *Perspectives in Middle School Education, 1964-1984*. Columbus, OH: National Middle School Association.
- Merenbloom, E. Y. (1988). *Developing effective middle schools through faculty participation*. Columbus, OH: National Middle School Association.
- Merriam, S. (1998). *Qualitative research and case study applications in education*. San Francisco: Jossey-Bass.
- Merriam-Webster's collegiate dictionary*. (1997). Springfield, MA: Merriam-Webster, Incorporated.
- Moss, T. C. (1969). *Middle school*. Boston: Houghton Mifflin.
- National Middle School Association. (1982). *This we believe*. Columbus, OH: Author.
- National Middle School Association. (1992). *This we believe*. Columbus, OH: Author.
- National Middle School Association. (1996). *NMSA research summary #4: Exemplary middle schools*. Westerville, OH: NMSA.
- National Middle School Association. (2003). *This we believe*. Columbus, OH: Author.
- Office of Program Policy Analysis and Government Accountability. (1996, March 29). *Information brief of Florida's K-12 gifted program*.
- Parkay, F., & Stanford, H. (1992). *Becoming a teacher*. Colorado Springs, CO: Cook Communications.

- Passow, A. H. (Ed.). (1979). *The gifted and talented: Their education and development*. (The 78th Yearbook of the National Society for the Study of Education). Chicago: University of Chicago Press.
- Passow, A. H. (1985). Intellectual development of the gifted. In F. R. Link (Ed.). *Essays on the intellect* (pp. 22-44). Alexandria, VA: Association for Supervision and Curriculum Development.
- Peterman, F. P. (1990). Successful middle level schools and the development of programs for the gifted. *NASSP Bulletin*, 74(526), 62-65.
- Plucker, J. A., & McIntire, J. (1996). Academic survivability in high-potential middle school students. *Gifted Child Quarterly*, 40(1), 7-14.
- Renzulli, J. (1978). What makes giftedness? Reexamining a definition. *Phi Delta Kappan*, 60(3), 180-184, 261.
- Renzulli, J. S., & Reis, S. M. (1985). *The school-wide enrichment model: A comprehensive plan for educational excellence*. Mansfield Center, CT: Creative Learning Press.
- Rimm, S. B. (1986). *Underachievement syndrome, causes and cures*. Watertown, WI: Apple.
- Shields, C. (1994). Differentiated instruction. *Curriculum Review*, 3(6), 3.
- Shore, B. M., Cornell, D. G., Robinson, A., & Ward, V. S. (1991). *Recommended practices in gifted education: A critical analysis*. New York: Teachers College Press.
- Sicola, P. K. (1990). Where do gifted students fit? An examination of middle school philosophy as it relates to ability grouping and the gifted learner. *Journal for the Education of the Gifted*, 14(3), 37-49.
- Silverman, L. (1990). Response to issue question: Should gifted students be dedicated in special programs outside the regular classroom? *Association for Supervision and Curriculum Development Update*, 32(8), 52.
- Sloan, C., & Stednitz, U. (1993). The Enrichment Triad Model for the very young gifted. *Roeper Review*, 6(4), 204-206.
- Smutny, J. F., & Blocksom, R. H. (1990). *Education of the gifted: Programs and perspectives*. Bloomington, IN: Phi Delta Kappa.
- Stake, R. (1995). *The art of case study research*. London: Sage Publications.

- Sternberg, R. J. (1986). *Intelligence applied: Understanding and increasing your intellectual skills*. San Diego, CA: Harcourt Brace Jovanovich.
- Swaim, S. (2003, Winter). What middle school should and can be. *NAESP*, 4-6.
- Taylor, C. W. (1978). How many types of giftedness can your school tolerate? *The Journal of Creative Behavior*, 12(1), 39-51.
- Taylor, C. W. (1985). Cultivating multiple creative talents in students. *Journal for the Education of the Gifted*, 8(3), 187-198.
- Taylor, C. W. (1986). The growing importance of creativity and leadership in spreading gifted and talented programs world-wide. *Roeper Review*, 8(4), 256-263.
- Taylor, C. W., Lloyd, B., & Rollins, J. (1971). Developing multiple talents in classrooms through the implementation of research. *Journal of Research and Development in Education*, 4(3), 42-50.
- Terman, L. M., & Oden, M. H. (1951). The Stanford studies of the gifted. In P. Witty (Ed.), *The gifted child*. Boston: DC Heath.
- Thorndike, E. L. (1906). *The principles of teaching based on psychology*. New York: A.G. Seller.
- Tomlinson, C. A., & George, P. S. (2004, May). Teaching high ability learners in an authentic middle school. *Middle School Journal*, 7-11.
- Treffinger, D. J. (1986). *Blending gifted education with the total school program*. East Aurora, NY: D.O.K. Publishers.
- Unruh, G., & Unruh, A. (1984). *Curriculum development: Problems, processes, and progress*. Berkley, CA: McCutchan.
- Vars, G. F. (1987). *Interdisciplinary teaching in the middle grades*. Columbus, OH: National Middle School Association.
- Vars, G., & Lounsbury, J. (1967). *Modern education for the junior high school years*. Indianapolis, IN: Bobbs-Merrill.
- Van Hoose, J., & Strahan, D. (1988). *Young adolescent development and school practices: Promoting harmony*. Columbus, OH: National Middle School Association.
- Ward, V. (1979). The Governor's School of North Carolina. In A. Passow (Ed.), *The gifted and talented: Their education and development*. (The 78th Yearbook of the National Society for the Study of Education, Part I) (pp. 209-217). Chicago: University of Chicago Press.

- Whitmore, J. R. (1980). *Giftedness, conflict, and underachievement*. Boston: Allyn and Bacon.
- Wiles, J., & Bondi, J. (1981). *The essential middle school*. Columbus, OH: Charles E. Merrill.
- Winitzky, N. (1997). Great expectations: Emergent professional development schools, *Journal of Teacher Education*, 43(1), 3-18.
- Yin, R. K. (1994). *Case study research: Design and methods*. Thousand Oaks, CA: Sage.

BIOGRAPHICAL SKETCH

Brandy Lord Kamm was born in Jacksonville, Florida, and has spent the last 25 years in the Central Florida area. Growing up as a gifted student, she developed a passion about the education of gifted students and has spent the last 12 years studying the impact of education on the intellectually advanced. As a collegiate athlete, she has also made a commitment to helping student athletes reach their goals and receive a quality education. She has served as a coach, mentor, and counselor for athletes of all levels.

Kamm received a Bachelor of Arts degree from Stetson University in secondary education and social science. She received a Master of Education degree from the University of Central Florida in educational leadership and a Specialist of Education from the University of Florida in educational leadership. She will graduate with a Doctor of Philosophy degree from the University of Florida in Fall of 2005.

She began her career as a middle school history teacher at Deltona Middle School in Deltona, Florida. She became a Dean of Students at Millennium Middle School in Sanford, Florida, and spent the last several years as an Assistant Principal there.

Recently she accepted a faculty position to teach online for Western International University in Phoenix, Arizona. She also consults for a private educational company, Learning Express.

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



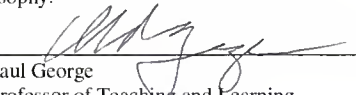
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Professor of Educational Administration and
Policy

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



James Doud
Professor of Educational Administration and
Policy

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



Paul George
Professor of Teaching and Learning

I certify that I have read this study and that in my opinion it conforms to acceptable standards of scholarly presentation and is fully adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.



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This dissertation was submitted to the Graduate Faculty of the College of Education and to the Graduate School and was accepted as partial fulfillment of the requirements for the degree of Doctor of Philosophy.

December 2005



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